

# THE IMPACT OF INSTITUTIONAL ENVIRONMENT ON INNOVATION TENDENCIES OF FIRMS: A FAILURE CASE STUDY

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> Izmir 2023

### ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

Adviye Ahenk AKTAN

Date: 03.01.2023

Signature:

### ABSTRACT

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described as Institutional theory is a perspective evaluating the institutionalization processes of the organizations in terms of how the norms and structures are valued and accepted by the elements of the organizations. Institutional factors influencing firms' innovative behaviors are then explored from the standpoint of isomorphic pressure mechanisms, including normative, coercive, and mimetic isomorphism. Then, an innovation theoretical framework is defined. To analyze the reasons of an institutional innovation failure, we have chosen a cluster of Turkish building material companies as a case study. The qualitative research method is utilized to gain a comprehensive understanding of the factors that influence the innovation propensities of businesses. Semi-structured interviews were undertaken to uncover in-depth perspectives on the inhibiting and facilitating effects of institutional contexts on the innovation inclinations of businesses. As a result, it is argued that in the failed cluster of firms analyzed institutional variables largely effect negatively propensity of companies to innovate. The findings demonstrate the considerable

influence of institutional factors on innovation precursors and, consequently, the innovation propensities of companies. In light of the fact that most innovation studies in the academic literature are empirical studies that offer a universal rationality perspective in terms of innovation precursors and innovation relationships, the findings of this study provide a broader perspective by addressing some unanswered questions pertaining to local innovation systems.

Keywords: Innovation, Institutional Theory, Isomorphism, Systems of Innovation



### ÖZET

### KURUMSAL ÇEVRENİN FİRMALARIN İNOVASYON EĞİLİMLERİ ÜZERİNE ETKİSİ: BİR BAŞARISIZLIK VAKA ÇALIŞMASI

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#### Ocak, 2023

Kurumsal çevrenin firmaların inovasyon eğilimleri üzerindeki etkisinin araştırıldığı bu tez çalışmasında, öncelikle; örgütlerin kurumsallaşma süreçlerini, kural ve yapıların örgüt unsurları tarafından nasıl değerlendirildiği ve kabul edildiği açısından inceleyen bir kuram olarak tanımlanan kurumsal teori ele alınmış ve açıklanmıştır. Daha sonra, firmaların inovasyon eğilimlerini etkileyen kurumsal faktörler; normatif, zorlayıcı ve mimetik izomorfizm olmak üzere izomorfik baskı mekanizmaları açısından tartışılmıştır. Sonrasında, inovasyon açısından teorik açıklanmıştır. İnovasyonun kurumsal başarısızlığının nedenlerini cerceve inceleyebilmek için, aynı yerel kümede yer alan bir dizi Türk inşaat firması örneği seçilmiştir. Şirketlerin inovasyon eğilimlerini etkileyen unsurlar hakkında edinmek için, derinlemesine fikir araștırma nitel araștırma yöntemiyle desenlenmiştir. Şirket sahipleri ve yöneticileri ile yarı yapılandırılmış görüşmeler yapılarak; şirketlerin inovasyon eğilimleri üzerinde kurumsal çevreden kaynaklanan engelleyici ve kolaylaştırıcı etkilere ilişkin görüşler derinlemesine incelenip ortaya çıkarılmaya çalışılmıştır. Sonuç olarak, kurumsal faktörlerin firmaların inovasyon yapma eğilimlerini çoğunlukla olumsuz olarak etkilediği sonucuna varılmıştır. Çalışma bulguları, kurumsal unsurların inovasyon öncülleri ve dolayısıyla inovasyon eğilimleri üzerindeki belirleyici rolünü ortaya koymuştur. Literatürde yer alan inovasyon çalışmalarının genellikle inovasyon öncülleri ve inovasyon ilişkileri açısından genel bir rasyonalite yaklaşımı sunan ampirik çalışmalar olduğu dikkate alındığında; çalışma bulguları, literatürdeki yeterince ele alınıp incelenmemiş konuları ele alarak, özellikle yerel inovasyon sistemleri açısından geniş bir bakış açısı sunmaktadır.

Anahtar Kelimeler: İnovasyon, Kurumsal Kuram, İzomorfizm, İnovasyon Sistemleri

To my beloved family... My mum Ayfer Aktan, my dad Adil Aktan, my brother Altan Aktan

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### PREFACE

As a person who has always liked the convergence of imagination and science, I have always admired this phrase from the great author Ursula Le Guin "People who deny the existence of dragons are often eaten by dragons. From within." We are all lifelong learners, and our lives are perpetually in flux. I want those whose lives are in transition, but who are also determined to tread the route to their future and goals, to draw their power and resolve from the junction of imagination and science. And contrary to the constructed reality that leads us to believe that dragons do not exist, I wish for everyone of us to travel confidently on the bright path of wisdom by first having faith in ourselves.

IZMİR 03/01/2023

Adviye Ahenk Aktan

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### **CHAPTER 1: INTRODUCTION**

Innovation is one of the driving forces behind organizational success and a crucial notion for gaining and sustaining competitive advantage (Chatzoglou and Chatzoudes, 2008). The studies examining the effects of organizational factors (Chatzoglou and Chatzoudes, 2008; Zeng, Xie and Tam, 2010; Hadjimanolis, 2000; Tavassoli, 2015; Avermaete et al., 2004), environmental and cultural factors (Tavassoli, 2015; Avermaete et al., 2004) on the emergence of innovation are considered to be effective (Naranjo-Gil, 2009; Koberg, Detienne and Heppard, 2003; Sarooghi, Libaers and Burkemper, 2015; Detienne and Koberg, 2002; Hadjimanolis, 2000).

Organizational factors that have positive effects on innovation are the factors such as knowledge management and intellectual capital (Tavassoli, 2015; Chatzoglou and Chatzoudes, 2008), organizational skills and organizational culture (Chatzoglou and Chatzoudes, 2008), strategy (Hadjimanolis, 2000; Li, Lin and Chu, 2008), R&D investments and R&D studies (Hadjimanolis, 2000; Avermaete et al., 2004; Roper et al., 2000), the establishment of partnerships with technology providers, technological information sources, the use of partnerships with research institutions, brokerage firms, inter-firm collaborations such as the relationships between different cooperation networks and collaborations with customers (Hadjimanolis, 2000; Zeng, Xie and Tam, 2010; Mention, Temel and Torkkeli, 2013), the demographic characteristics of the owner of the organizations, organizational structure and operation scale and firm size (Tavassoli, 2015; Damanpour, 1991) and the administrator attitudes (Damanpour and Schneider, 2006; Damanpour, 1991). In addition to organizational factors which are determinative on innovation outputs; factors such as environmental dynamism expressing the extent of unpredictable change in the external environment (DeTienne and Koberg, 2002; Koberg, Detienne and Heppard, 2003), uncertainty and market concentration (Naranjo-Gil, 2009), cultural factors (Sarooghi, Libaers and Burkemper, 2015; Hadjimanolis, 2000; Turro, Urbano and Peris- Ortiz, 2014), economic, social and industry- specific factors, government policies, legislation and infrastructure (Hadjimanolis, 2000; Avlonitis, Kouremenos and Tzokas, 1994) are also determinative factors on innovation outputs of the firms. In addition, national innovation systems, such as education systems, labor markets, financial markets, intellectual property rights, product market competitiveness, and welfare regimes, impact the interactions of enterprises inside knowledge infrastructures. The outcomes of these interactions include learning and innovation. Therefore, the aspects of national innovation systems support and enable firms to learn from one another as they develop innovative competences (Lundvall, 2007). In this sense, different national contexts offer diverse opportunities for building structured marketplaces and participatory learning processes (Lundvall et al., 2002).

In addition, studies on innovation determinants in Turkey frequently examine the effects of organizational structures, the level of hierarchy in the organization, and employee decision-making mechanisms (Öncel, 2018); organizational learning and personnel empowerment, university-industry collaborations (Özdevecioğlu and Biçkes, 2012; Yıldırım, 2010; Çelik, 2011), leadership styles (Görker, 2017; Bayram, 2013), and organizational culture (Okan, 2018; Vayni, 2017; Sönmez, 2016). Despite the fact that innovation is a crucial issue for businesses at the stage of establishing sustainable competition, the majority of innovation studies conducted in Turkey are quantitative in nature. Consequently, it can be shown that these research on innovation provide and offer a universal rationality perspective. Consequently, the prevalence of such a universal perspective in these empirical investigations raises the question of how appropriate these ideas are to the local situation.

Hadjimanolis (2000) highlighted two crucial factors in the hunt for innovation precursors. Regarding innovation studies, Hadjimanolis emphasized the significance of how to approach the concept of innovation and the significance of studying the innovative premises within institutional approaches that explain the inclusive nature of the investigated country or region. In addition, according to Trott (2008), who highlights that technology is an institutionally and socially rooted process, innovation is a term that cannot be separated from both local-national context and political-social processes. Geels (2004), on the other hand, placed an emphasis on the dynamic interactions between the constituents of innovation systems and their interdependence when discussing innovation from a system perspective. Such a structural basis permits the examination of multi-level features of the innovation as a system process (De Pra Carvalho et al., 2017; Geels, 2004).

Also, Coenen and Lopez (2008, p. 4) provided a model for understanding innovation from a system perspective, highlighting the sectoral system, the technological system, and the socio-technical system as the three primary approaches of the theory of innovation. Coenen and Lopez (2008) define an innovation system as organizational and institutional networks that produce, diffuse, and exploit innovations (Coenen and Lopez, 2008, p.4). A sectoral system of innovation is a system of enterprises that are active in the development and production of a sector's products and in the generation and use of its technology. In such a system, enterprises are interconnected in two distinct ways: through processes of interaction and cooperation in artifact-technology development, and through processes of competition and selection in innovative market activities. The technological system is defined as the networks of agents engaging in a certain technology area inside a specific institutional infrastructure in order to develop, disperse, and consume technology. Although these approaches share an emphasis on the interconnectedness of system elements and a view of innovation as a co-evolutionary process, Geels (2004) stressed the importance of displaying the dynamic interactions between these elements. In this regard, Geels (2004) includes both the supply side (innovations) and the demand side (user environment) in the definition of systems, broadening the analytical scope of the innovation systems from sectoral systems of innovations to socio-technical systems, so that the fulfillment of societal functions becomes central and the focus is not only on innovations, but also on the use and functionality. Geels (2004) proposed an analytical distinction between the following types of innovation system elements: systems (resources, material aspects), actors participating in sustaining and modifying the system, and the norms and institutions governing actor's perceptions and activities. In such an analytical distinction, it is emphasized that innovation systems do not operate independently, but rather are the result of the activities of human actors immersed in social groupings that share particular traits, such as certain roles, norms, and views. In addition to the institutional roles in developing these actors within innovation systems, intragroup cooperation between actors and institutions is also utilized to comprehend these actors' responsibilities inside innovation systems. In addition, institutions are given additional consideration to prevent misclassifications that incorrectly equate institutions with non-market entities (Geels, 2004). Geels (2004) emphasized the significance of better conceptualizing the role of institutions in innovation dynamics and explaining the dynamic role of institutions such as professional societies, trade associations, government agencies, independent research and coordination organizations, and public-service organizations, rather than inertia and stability. Given the opportunity

to consider and analyze their relationships within the conceptual framework where systems, actors, and institutions/rules are viewed as three interconnected dimensions, innovation is thus viewed from a system perspective through the dynamic interactions between the elements of innovation systems (Geels, 2004).

The empirical studies emphasizing the significance of institutional theory approach in innovation studies (Moyano-Fuentes, Maqueira- Marin and Bruque-Camara, 2018; Wu, Liang and Zhang, 2021; Garrone, Grilli and Mrkajic, 2018; Yang et al., 2019; Aragon-Correa and Leyva-de la Hiz, 2016; Pinho, 2017) analyzed the impact of institutional factors on the innovation strategies of (Moyano-Fuentes, Maqueira- Marin and Bruque- Camara, 2018; Garrone, Grilli and Mrkajic, 2018). According to Moyano-Fuentes, Maqueira- Marin, and Bruque- Camara (2018), who emphasized the inadequacy of focusing solely on economic rationality in companies' environmental sustainability practices and strategies, organizations should also consider normative rationality when developing their strategies. For instance, process innovations relating to environmental sustainability are discussed from the perspective of economic rationality, and consequently, evaluations are conducted at the point of rising demand as a result of the development of environmental performance activities and the creation of benefits and resources in response to this rising demand. Similarly, including the normative rationality approach into strategic decision-making will enable firms that choose to innovate to better respond to the requirements of their surrounding stakeholders and, in turn, to manage their environmental sustainability practices more effectively (Moyano-Fuentes, Maqueira-Marin and Bruque- Camara, 2018). Similarly, according to Garrone, Grilli and Mrkajic (2018), who emphasize the significance of the effect of institutional environment on innovation strategies, although energy efficiency strategies are dependent on the environment of the companies, institutional characteristics that surround the companies influence these activities. Studies on energy efficiency improvements, for instance, focus on topics such as energy prices, information stocks, and push-pull methods, and examine the issue from the perspectives of demand and technology. In this sense, they can disregard the fact that corporations make decisions inside a complicated institutional framework. In this way, corporations that choose strategy are unable to assess the consequences of legal, regulatory, and social characteristics within the institution's complicated structure (Garrone, Grilli and Mrkajic, 2018). In contrast, Aragon-Correa and Leyva-de la Hiz

(2016), in their study examining the different effects of institutional theory and resource- based approach on innovation, emphasized the significance of revealing these distinctions (the distinctions between institutional theory and resource based approach) so that the strategies proposed by the companies are compatible with one another, support and reinforce one another. According to Wu et al. (2019), numerous research have explored the effects of the institutional environment on company strategy and financial performance, but there is no clear consensus on the precise effects of the institutional environment on the strategic decisions and performance of organizations. Wu et al. (2019) underlined the difficulty of characterizing institutional impacts on firm performance without isolating the effects of various institutional elements and without defining each mechanism of various institutional aspects that affect firm performance. The authors examine the institutional environment from three different perspectives: market sophistication, intellectual property rights protection, and cultural diversity. In addition, they evaluated the influence of the host market's institutional environment on the innovation performance of developing multinational corporations. Wu et al. (2019) explored the contingent influence of the institutional environment on business performance via various institutional factor mechanisms by including institutional theory into their analysis. Moreover, Yang et al. (2019) emphasized the significance of institutional environment effect on the managerial cognitive structure in innovation strategies. Institutions comprised of regulatory, normative, and cognitive components influence the perceptions of managers and, by extension, the cognitive structure of strategy formation. However, the authors drew attention to a deficiency in the literature regarding studies of the effects of institutional pressures on the managerial cognition that shapes environmental strategies (Yang et al., 2019). Although there are empirical studies highlighting the significance of institutional environment in innovation studies, it is evident that these studies primarily examine the effects of institutional environment on innovation in terms of innovation strategies and managerial perceptions related to strategic decisions. As a result, attempting to elicit the fundamental aspects of innovation determinants in the framework of a thorough local study becomes a key topic. In this regard, a contribution to the literature will be made by conducting a holistic and comprehensive study that takes into account not only institutional effects on innovation strategies, managerial cognitive and managerial perceptions related to strategic decisions, but also all the elements of the

institutional structure that are decisive on the innovation tendencies of the firms. However, innovation is the result of the interaction of diverse processes involving innovation determinants and organizations-affecting institutions. In such an interactive environment, it is insufficient to examine the concept of innovation just from the standpoint of empirical research, in which and certain variables are evaluated unilaterally and research is undertaken mostly independently of the local context. With such an in-depth investigation, it will be feasible to identify the innovation determinants emanating from the institutional framework as well as the qualitative innovation determinants already identified in the literature. Consequently, in addition to evaluating the correlations between variables within the institutional structure in which all of these aspects are entrenched, it will be feasible to disclose the dynamic interplay between various elements affecting innovation. Considering that the majority of innovation studies in Turkey are quantitative and present a universal rationality approach in terms of innovation determinants and innovation relationships, attempting to elicit the constituent elements of innovation determinants within a comprehensive research at the local context will make a significant contribution to the question of how applicable these universal rationality approaches are to the local context. Because, to put it another way, innovation research on Turkey consists mostly of quantitative studies with dominant theory-testing research methodologies, reflecting a universal rationality perspective, quantitative studies dominate innovation research on Turkey. This attitude raises the question of the local validity of these notions. Examining the concept of innovation from such a holistic vantage point will also afford the possibility to expose many more subvariables, so enriching the interpretation of the relationships. In the study, the factors influencing the innovation tendencies of firms in the brick and tile and ready-mixed concrete sectors in the Manisa and Izmir regions are investigated. In this regard, the objective is to discover the local context's inhibiting and enabling variables for innovation. To gain an in-depth understanding of the elements influencing the innovation inclinations of firms, the qualitative research approach will be used to conduct the study. The purpose of the semi-structured interview technique is to obtain thorough responses to questions regarding "what is happening" in company processes and the reasons why innovations can/cannot be made in these processes. The purpose of the interviews is to study the executives' opinions of innovation, their innovation intentions, and their perspectives on the elements that impede and facilitate this process. In order to contribute to the competitive structure of the sector, it is a goal of this study to identify the variables inhibiting and supporting the innovation tendencies of enterprises and to create an executive summary of the managerial and political consequences of innovation.

#### 1.1. Research Question

The purpose of this study is to explore and describe the innovation trends of enterprises in the Izmir and Manisa/Turgutlu region. In this direction, the objective is to disclose and identify the inhibiting and enabling elements that influence the innovation propensities of enterprises operating in the regions identified in the scope of this thesis study. In this perspective, the sub-questions of the research are identified and summarized as follows:

- In what strategic context and general environment do the companies operate?
- What are the firms' approaches to innovation and competitiveness in this context?
- What variables influence the innovation tendencies of competing businesses?
- Are there (positive/ negative) determinants of institutionalized structures in organizations' approaches to innovation? If so, what effect do they have?

Within the framework of the sub-questions, semi-structured interview questions were administered to companies in the field, and the results were coded using qualitative content analysis.

To present a clear study, I attempt to organize the content of my research such that it is accessible to both academic and practical audiences. In the second chapter that follows, I will first survey the pertinent theoretical literature. Institutional theory is discussed in this context as a theory that investigates the institutionalization processes of organizations in terms of how the rules, structures, and behaviors are valued and accepted by the organization's components. Then, institutional factors impacting the innovation behaviors of businesses are analyzed in terms of isomorphic pressure mechanisms, including normative, coercive, and mimetic isomorphism. In Chapter 3, a theoretical foundation for innovation is addressed. Then, in chapter 4, the research design, context, research methods, and sample are described in depth. In chapter 5, the research's findings and analysis are presented. After describing the significant findings in this chapter, a unifying model is offered in light of the key findings. This chapter continues with sections on implications for theory, implications for managerial practices, and policymakers. In this way, Chapter 5 expands on the findings discussion and provides some management and practical implications. In the concluding chapter (chapter 6), I explore the limits of the study and future research in order to highlight what could be done to improve the study findings.



### CHAPTER 2: THEORETICAL BACKGROUND: INSTITUTIONAL FACTORS AFFECTING FIRMS' INNOVATION BEHAVIORS

### 2.1. Institutional theory and its origin: old institutional theory

When examining the historical evolution of institutional theory, which is categorized under two distinct heads as old and modern institutional theory, its origins may be traced back to the late 1940s. The bureaucracy-based studies of Max Weber were succeeded by the studies of Robert K. Merton and his colleagues around the end of the 1940s. Therefore, institutional theory studies can be stated to be founded on outcomes of the studies of bureaucracy, bureaucratization processes and bureaucratic resources and its repercussions in terms of organizational behavior. The investigations conducted by Robert K. Merton's students Selznick (1949), Gouldner (1954), Blau (1955), and Lipset and others (1956) were crucial in setting the groundwork for institutional theory. In addition, although the old institutional theory is mostly based on Selznick's (1949, 1957) work, Robert K. Merton's influence on Selznick's work is substantial. Even though Merton (1940, 1957) did not use the term institutionalization in his study titled "Bureaucratic Structure and Personality", the study is significant in highlighting the qualities of bureaucratic structure, its formality in organizations, legitimacy, and intra-organizational standards (Kartepe, 2010). Merton's (1940, 1957) empirical investigations of organizational phenomena within the context of the functionalist method had two objectives. An approach focused on an institution's contribution to the operation and continuity of the social system in which it is embedded. In other words, it is a method based on the functions of society's institutions. In this context, one of these aims is to analyze the dependent change between various structural elements. The second objective is to analyze the functionality and balance of the structural arrangements' non-functional and beneficial outcomes. The fundamental tenets of both goals are the necessity of the integration of all structural elements within the system to ensure the system's continuity, as well as the fact that a change in one structural element will necessitate a harmonious change in other parts within the system (Tolbert and Zucker, 1996, pp.175-190). Following Merton's research (1940, 1957), Philip Selznick's TVA and the grassroots (1949), the organizational weapon (1952), and leadership in administration (1957) are cited as the primary reference works for the old

institutional theory (Kartepe, 2010). In these studies, Selznick (1949) focused on two concepts and explained how the Tennessee Valley Authority, which was established to improve the economic situation of the Tennessee Valley region, made strategic decisions affecting its capacity to respond to environmental threats and protect itself from the environment, as well as how its character had evolved. In his 1952 study titled The Organization Weapon, he demonstrated how the use of Leninist organizational tactics may transform members of a volunteer entity into disciplined and deployable proxies with a distinguishing qualification. In his 1957 book Leadership in Administration, Selznick attempts to make sense of his works and presents his conclusions by distinguishing between the concepts of organization and institution. It is underlined that when an organization institutionalizes, it will acquire a unique personality, acquiring particular competencies or even tending towards incapacity. In this regard, he underlined that monitoring the institutionalization process - both its advantages and disadvantages - is a crucial duty of leaders. Institutionalization theory also describes the creation of strategies, processes, and differentiated structures, which are the responses of organizations to both their internal and external environments (Selznick, 1996).

#### 2.2. New institutional theory

Prior to the 1960s, organization theory viewed organizations as autonomous, structurally significant systems. The organizational structure was based on the organizational leaders' goals and values in the organizations, which were viewed as autonomous systems. In addition to focusing on notions such as hierarchy and efficiency, the following incorporation of the human relations school led to the consideration of the need for organizational structures to take employees' needs into account. But still, the focus remained on identifying the organizational leaders to develop the most effective organizational structures. In this perspective, organizations and their members were viewed as rational elements that pursued predetermined organizational goals and took the most precise actions towards these objectives. By approaching organizations as a rational system comprised of inputs such as finance, raw materials, labor, information, outputs, products and services, and technology that converts inputs to outputs, organization theorists have focused on what structural features, such as specialization, centralization, and reward, enable organizations to successfully achieve their goals. Beginning around 1970,

organizational theorists shifted their attention to organizations' external environments. By adopting Selznick's (1957) first concept of institutionalization, these theorists began to assert that organizations modify their structures not just in response to internal systemic causes, but also in response to the external environment's need for resources, information, and legitimacy. As the emphasis shifted to the environment, theorists abandoned rational actor models when conceptualizing organizations. And in this context, their discussions are founded on the assertions that actors within an organization cannot control the larger social forces that surround it, regardless of its rational aim, and hence organizations will be moulded appropriately. Institutions are not variables depending on organizational purpose and human design when evaluating the cultural grounds for institutional growth; hence, institutional development is regarded as a process. In this perspective, institutionalization is viewed as a process involving norms, structures, and behaviors that are valued and accepted by the organizational parts (Shulock, 1998). The old institutional theory viewed organizations as autonomous and rational agents, whereas the new institutional theory embraced the notion that organizations are embedded within institutional settings and focuses on the institutionalization of environment which affects organizations. With this perspective, the external environment has been incorporated into the analysis and the focus has been placed on institutions that were excluded from the traditional institutional theory. Prior to the new institutional theory, organizations were viewed as rational structures pursuing their objectives; however, the new institutional theory examines organizations as more harmonious structures than rational actors (Özcan, 2011). According to DiMaggio and Powell (1991), the new institutionalism rejects rational-actor models (DiMaggio and Powell, 1991, p. 8). Regardless of their logical intentions, organizations cannot control their external environment, according to the new institutional theory. In order to get resources and legitimacy, organizations will adjust to external institutional elements that limit and surround them. Prior to the new institutional theory, organizations were described as a vision of rational organizational design and targeted at the production of commodities and services. However, with the new institutional theory, the emphasis has switched to organizations. Along with the new institutional theory, organizations have been recognized as structures that tend to harmonize with the structure of the institutional environment, hence limiting the capacity of organizations to deal with external uncertainties (Shulock, 1998; Özcan, 2011).

In a formal organizational structure, new institutionalization theory is viewed as a business activity in which technical relationships embedded in a network of coordinated and controlled systems and elements emerging from these structures in modern societies are viewed as highly institutionalized contexts. In these circumstances, professions, policies, and programs are disclosed in addition to products and services, and these professions, policies, and programs produce a certain rationale. This enables for the formation of new organizations, while forcing current organizations to adopt new practices and processes. In other words, organizations are compelled to adopt established, valid, and rational techniques and procedures in the field of organizational work in society and incorporate them into their structures. Consequently, they enhance their legitimacy and their prospects of survival (Meyer and Rowan, 1977). From organizations to actors to technological tasks, rationalized structures receive their resources, purpose, and legitimacy from their connections to contemporary standards of public good (Jepperson and Meyer, 1991). Formal organizational structures are not merely a product of social organization's relationship networks. In contemporary civilizations, parts of rationalized formal structure are ingrained in social reality and also reflect the prevailing perception of social reality. Numerous stances, policies, and processes in contemporary organizations are dictated by the perspectives of significant parts of society, the ideals of society and the public, and information legitimized by social status, laws, and education. These aspects of the formal structure represent highly reasoned beliefs that companies must adhere to as a manifestation of rigid institutional standards. As an illustration of these misconceptions, professions program technology appear as markers of strong institutional regulations and are remarkable on formal organizational structures. In achieving legality, acquiring resources, maintaining their continuity and existence, and establishing formal structures, the institutional rules surrounding organizations have a significant impact as a powerful myth. In this approach, organizations become synonymous (isomorphic), beginning to exhibit formal resemblances due to the impact of their institutional environment's mythology. Institution is described as the environment in this context, and institutionalization reflects social processes, imperatives, and rulelike realities in social thoughts and actions. As a result of this process, companies effectively accept institutionalized goods, processes, and programs as potent myths, and the formal structures of organizations reflect myths from their institutional context (Meyer and Rowan, 1977), if they constitute necessary for business activities. Following Meyer and Rowan's (1977) work, DiMaggio and Powell's (1983) clarification of the words "organizational field" and "isomorphism" is crucial to the development of the new institutional theory (Kartepe, 2010). In their 1983 work, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields", Powell and DiMaggio described the isomorphic processes - coercive, mimetic and normative - that influence this process, emphasizing that organizations are similar as they attempt to change. According to Powell and DiMaggio (1983), the demand for efficiency or competition no longer drives structural changes in organizations. In contrast, bureaucratization and other organizational changes are brought about through processes that make organizations more similar to one another. These procedures are mainly impacted by the government or professionalization. At the conclusion of these processes, structured organizational regions emerge that provide a foundation for how organizations can rationally face uncertainty and restrictions, and achieve uniformity in culture, output, and organizational structure. Numerous contemporary theories of organization attempt to explain the diversity in structure and behavior within a variety of organizations (DiMaggio and Powell, 1983). For instance, in response to the question "why are there so many sorts of organizations?" (Hannan and Freeman, 1977), DiMaggio and Powell (1983) posed the question "why is there such astonishing homogeneity of organizational forms and practices?" and sought to explain homogeneity, not variation (DiMaggio and Powell, 1983). In the early phases of an organization's existence, strategy and structure differ considerably, but, after the development of the organizational field, there is an inevitable push towards the homogenization of organizations working in this field. The concept of "organizational field" as defined by DiMaggio and Powell (1983) refers to the total number of organizations that make up the recognized area of corporate life, including major suppliers, consumers of resources and products, regulatory agencies, and other organizations that produce similar goods and services. In the organizational field approach, this unit is central to the study; in the population ecology approach, the focus is on competing organizations; and the network approach theory incorporates and defines not the networks of interacting organizations, but the whole of relevant individuals (DiMaggio and Powell, 1983).

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Organizational fields exist so long as they are institutionally defined. In the process of institutional identification or structuring, issues such as the increase in inter-organizational interaction in the institutional field, the emergence of structures that provide dominance and coalition, the increase in the formation load that organizations must deal with and struggle with, and the increase in the participants' awareness that they share a common ground emerge and are observed. When several organizations in the same line are constructed inside the same institutional field, they may be subjected to severe coercive pressures to resemble one another, which may force companies to alter their mission and adopt new practices. Isomorphism explains the similarities between organizations within the same organizational field (DiMaggio and Powell, 1983). DiMaggio and Powell (1983) described isomorphism as a restricting process in which a unit in a population subjected to comparable environmental conditions resembles other units in the population. They also identified two types of isomorphism: competitive and institutional. Competitive isomorphism, which Hannan and Freeman (1977) analyzed in their famous work, is viewed as system rationality within market rivalry, niche modifications, and compliance measures. According to DiMaggio and Powell (1983), it has more to do with conditions of open and free competition. However, this circumstance (competitive isomorphism) does not accurately reflect organizational structures in the current world, and hence institutional isomorphism should also be supported. In addition to competing for customers and resources, organizations also struggle for political power and institutional legitimacy. Consequently, organizations are also striving for economic and social harmony. Institutional isomorphism is crucial for comprehending the behavior of contemporary organizational structures and the policies and rituals that propagate between organizations (DiMaggio and Powell, 1983).

#### 2.3. The concept of isomorphism

Institutionalization represents a distinct set of social reproductive processes and can be differentiated from the absence of reproductive processes or repetition of social patterns (Jepperson, 1991). Institutionalization theorists who examine the process of institutionalization and the function of institutions in society attempt to demonstrate how activities have become a social reality and set of rules through time. In this context, the institutionalization approach focuses on how actions become social reality and how they are accepted both inside and outside of the firm, as well as how these activities and behaviors become organizational practices. In this regard, institutionalization studies describe how these efforts lend legitimacy to organizations and contribute to their long-term viability (Jennings and Zandbergen, 1995).

Isomorphism, which developed as one of the key principles of the institutionalization method, refers to a process wherein organizational units in a field become more similar as a result of coping with similar external constraints. Isomorphism describes the process of structural homogeneity, in which organizations tend to become more similar to one another. Due to the isomorphism process, organizational traits change in similar ways, allowing units in a region to adapt to external conditions more effectively. Competitive coexistence emerges under a rational system that prioritizes market competition; institutional coexistence arises as a result of organizations striving for social conformity, political power, and institutional legitimacy within the institutional field. As institutional isomorphism is unavoidable (Shepard, Betz and O'Connell, 1997). In the next sections, normative, mimetic, and coercive isomorphism are described in detail under the heading of institutional isomorphism mechanisms.

### 2.4. The concept of legitimacy

Old management theories viewed organizations as social machines that effectively convert material input to material output. Perspectives on organizations have shifted since the end of the 1960s, when open systems theories conceptualized the boundaries of organizations and institutional theories emphasized that many dynamics in the organizational environment stem not only from technological or resource-related requirements, but also from cultural norms, symbols, beliefs, and rituals. The legitimacy of the organization is the foundation for this development and transition. In this setting, foundational research in organizational theories have been expanded by highlighting the normative and cognitive forces that constrain, structure, or empower organizational actors, and legitimacy has begun to be regarded as the linchpin of these theories (Suchman, 1995).

Legitimacy is the widespread view or presumption that an organization's activity is desirable and appropriate in terms of the norms, values, beliefs, and

definitions of the socially created system in which it functions (Suchman, 1995). Legitimacy is a socially organized element that displays the compatibility between the actions of the legitimized entity and the shared beliefs of a specific social group. Consequently, it is not a term depending solely on particular observers, but rather on collective participation. This structure defines legitimacy as an element that is not formed subjectively, but has an objective form, reflecting the reactions of observers to what they observe in enterprises (Suchman, 1995).

Organizations seek legitimacy for a variety of reasons. Legitimacy enhances the inclusivity and consistency of organizational activity. Legitimacy supports organizations with permanence since observers donate resources to groups deemed desirable and suitable. Therefore, the degree of legitimacy refers to the entrenchment of beliefs and actions within the institutionalized system. The legitimacy of an organization impacts how viewers respond to and comprehend the organization. Viewers regard an institution as legitimate not only because they believe it deserves legitimacy, but also because they find it to be more significant, predictable, and dependable (Suchman, 1995). According to Meyer and Rowan (1991), organizations whose actions are deemed illegitimate are more susceptible to allegations that they are unneeded, illogical, and insensitive (Meyer and Rowan, 1991, p. 50).

Suchman (1995) identifies two distinct techniques to analyzing the idea of legitimacy from two perspectives, namely strategic legitimacy and institutional legitimacy, in order to highlight the distinctions between the approaches used in legitimacy studies. Strategic and institutional legitimacy are evaluated while assessing the legitimacy of an organization. Strategic legitimacy studies depict legitimacy as an operational resource; in this perspective, legitimacy is viewed as the power organizations acquire from their cultural context in order to attain their objectives. In this regard, strategic legitimacy emphasizes the administrative control of the organization over symbols and rituals that outwardly limit the tangible outputs, such as sales, earnings, or budgets, and administrative control over the institutionalization process. In contrast to strategic tradition, institutional analysts view legitimacy as a set of constitutive beliefs rather than an operational resource. According to this theory, not only do organizations derive legitimacy from their surroundings, but institutions also form and process organizations from all perspectives. Cultural definitions determine how organizations are constructed, operated, and understood, as well as how they are evaluated. According to this perspective, legitimacy and institutionalization have identical connotations in this regard (Suchman, 1995).

Suchman (1995) defined legitimacy in three main forms: cognitive, moral, and pragmatic. He did so by underlining the fact that organizational legitimacy exhibits both variations and similarities in its strategic and theoretical approaches. All three categories of organizational legitimacy comprise views and assumptions that organizational operations are entirely compatible with socially entrenched norms, values, beliefs, and definitions, but their behavioral dynamics differ. In utilitarian (pragmatic) view, legitimacy is based on the self-interest calculations of an organization's closest audience; this proximity typically involves direct exchange between the organization and the target audience, but can also include broader political, economic, or social dependencies in which organizational action visibly affects the viewer's well-being. In contrast to the utilitarian notion of legitimacy, normative legitimacy is based not on whether a certain organizational activity helps the evaluator or the parties, but on the precision with which that action is carried out. Frequently, the judgements in question reflect beliefs regarding whether an organizational activity effectively promotes social well-being as defined by the audience's socially established value system. In this way, moral legitimacy based on normative acceptance is a type of legitimacy that is socially accepted in the form of compliance with value judgments. Cognitive legitimacy is another sort of legitimacy that is founded on completeness, accuracy, and acceptability in terms of intelligibility. Legitimacy in a broad sense may encompass favorable support for an organization or the organization's required, unavoidable acceptance. This type of assurance and acceptance (taken-for-grantedness) is distinct from evaluation. Target audiences can evaluate a pattern positively, negatively, or neutrally, but regardless of the evaluation, they can accept the pattern unequivocally. This is the third set of generic legitimacy dynamics based on cognition as opposed to observation, curiosity, or evaluation. Theorists who emphasize the importance of intelligibility in legitimization frequently depict the social world as a chaotic cognitive environment in which participants strive to organize their experiences in accordance with consistent intelligibility values. At this point, legitimacy is achieved by adhering to established models and standards in an effort to achieve intelligibility (Suchman, 1995).

For the first organizations to alter their organizational structure and behavior inside an institutional field, organizational change has a pragmatic legitimacy that corresponds with the economic objectives of the company. With the appearance of change and the perception that change contributes to success, other organizations begin to adopt such change, and its symbolic worth exceeds its technical value, which makes sense to the organizations surrounding the organization at the core of the change. This results in moral validity that transcends technical value (Suchman, 1995; Özen and Yeloğlu, 2016) There is normative pressure on businesses to embrace specific tactics as a result of the widespread idea that certain techniques and practices will enable rational advancement. Despite the transience of fashion, the term of institution refers to activities having cognitive legitimacy beyond normative validity (Suchman, 1995; Özen and Yeloğlu, 2016).

#### 2.5. The concepts of institutions and institutionalization

Due to diverse perspectives, the concept of institutions and institutionalization has been defined differently (Scott, 1987). Philip Selznick and his students cite this as the first and most influential study of institutional theory. Selznick (1957) defined institutionalization as "something that happens to the organization over time" because he viewed organizations as structures that adapt to the constraints and influences of the external environment as well as structures that are shaped by the personalities and commitments of the organizational members. Organizations are technological tools meant to achieve particular objectives and are evaluated based on engineering disciplines, whereas institutions are appraised as groups or practices, are partially reviewed by engineering disciplines, and possess a social dimension. Consequently, institutions reflect group idealism as a consequence of interaction and cohesion (Selznick, 1957, pp. 21- 22). Selznick (1957), who viewed institutionalization in this context as a process of value creation, did not describe how this process originated (Scott, 1987).

Based on the work of Berger and Luckmann (1967), institutionalization is viewed as the process of producing reality, which is referred to as the formation of a common social reality via social interactions (Scott, 1987). Zucker (1977) and Meyer and Rowan (1977) were the two prominent figures in the organizational sector who formulated these concepts (social reality social order) (Scott, 1987).

According to Berger and Luckmann (1967), social order and rules are founded on a common social reality that is the result of human-made social interactions. Individuals create social order when they take action, interpret moves, and communicate their interpretations. These interpretations or typifications enable actors to classify behavior and respond accordingly. Institutionalization is described as the recurrence of activities over time and their equivalent meaning to the individual or individuals involved. Institutionalization results from the mutual categorization of routine conduct by multiple parties. Institutionalization occurs if there is a reciprocal categorization of ingrained behaviors by categories of actors (Scott, 1987).

The work of Luckmann and Berger (1967) is significant for conceptualizing institutionalization as the process of producing reality and for describing institutionalization as a process (Scott, 1987). Institution refers to a social order or pattern that has acquired a particular state or property, whereas institutionalization refers to the process by which this state or property is attained (Jepperson, 1991). According to Zucker (1977) and Meyer and Rowan (1977), two prominent names in the organizational field who developed the perspectives of Luckmann and Berger (1967), institutions are socially structured patterns in the development of acts and their ongoing interactions. From this vantage point, agents form institutions via a sequence of processes that reveal shared typifications. Institutions are described as agreed rules and classifications that specify the categories of social actors as well as the appropriate acts and connections of social actors (Barley and Tolbert, 1997).

The influence of Berger and Luckmann's (1967) research on the formation of social reality is seen in the views of Zucker (1977) and Meyer and Rowan (1977). Zucker (1977) viewed institutionalization as a process as well as a property variable. At each moment in the institutionalization process, which is described as individual actors socially transmitting the truth, the significance of this social action is defined as an unconditional acceptance of greater or lesser acceptability in reality. Consequently, institutionalized acts must be perceived objectively and from the outside (Scott, 1987). Institutionalization is the process of producing value and reality, whereas institutions as social systems are aspects within systems (Scott, 1987).

Berger and Luckmann (1967) characterized institutionalized rules as classifications established by society as reciprocal types (recycled types) or interpretations (Meyer and Rowan, 1977). Meyer and Rowan (1977) similarly saw institutionalization as disclosing social processes, imperatives, or realities, and acquiring a rule-like status in social thinking and behaviors (Meyer and Rowan, 1977), embracing the perspective of Berger and Luckmann (1977) (Scott, 1987).

In his study of the influence of institutionalization on cultural permanence, Zucker (1977) noted that varying degrees of institutionalization in manufactured realities will have three distinct effects on cultural durability. In other words, he viewed institutionalization as a variable that modifies cultural persistence in tandem with varying degrees of institutionalization in his research. Institutionalization is referred to in this context as both a process variable and a property variable. As a process variable, institutionalization refers to a stage at which individual actors communicate, in a social sense, what is defined as fact. Nonetheless, the meaning of an activity at any point in the process is also regarded as a more or less accepted element of this social reality, and institutionalization in the sense reflects the nature of a property variable. Institutionalized activities are both perceived objectively and from the outside. Actions are only objective when they are potentially reproducible by actors without altering the common understanding of action; actions are external when the subjective understanding of actions is reconstructed as an intersubjective understanding, so that actions are viewed as a part of the external world. In a system where micro and macro levels are interwoven, individual actors communicate an external and objective reality defined by interpersonal processes in order to arrive at shared conceptions of reality. Each actor perceives, defines, and then communicates to other actors a social reality thusly defined (Zucker 1977).

Institutionalization is viewed as a social process in which individuals accept the shared condition of the definition of social reality, based on an examination of the qualities shared by all these definitions. Institutionalization as a social process; its validity is described as a concept in which actors are viewed independently of their own perspectives and behaviors, but descriptions of how events are or should be are accepted without protest (Scott, 1987).

Institutionalization is defined as the formation of "institutions, which are socially constructed and continually replicated rule systems under normal conditions" (Jepperson,1991, pp. 145- 149). The regulatory aspect of institutions is influenced by laws and official norms, but the normative aspect is founded on moral truths. The cognitive dimension of institutions represents normal, habitual contexts and circumstances. It is capable of accommodating one or more of these dimensions

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within institutions (Özen and Yeloğlu, 2016). Scott (2001) characterized institutional pressures that define institutionalized rules and expectations as cultural cognitive, normative, and regulatory pressures. Cultural-cognitive pressures refer to mental models that enable actors in the institutional context to develop shared understandings and definitions for specific institutional settings. In contrast, normative pressures refer to established, evaluative, binding rules in social life and the benches that follow from these rules. These forces reflect the moral grounding for what is appropriate in the behaviors of actors operating inside the institutional field. Regulatory pressures, on the other hand, are sanctions-containing forces such as rulemaking, controlling compliance with regulations, and rewarding or punishing, if necessary, in order to influence and determine the future conduct of institutions (Kartepe, 2010).

Regulatory aspects, normative components, and cultural cognitive elements make up the institutions' distinguishing characteristics. Institutionalist economists, political scientists, and economic sociologists have mostly investigated the regulatory components of institutions. The regulatory elements of institutions consist of components such as power, fear, precaution, and norms, as well as methods such as rule-making capability, surveillance techniques, and pressures that influence behavior. Moreover, sociologists and social psychologists investigate normative aspects of institutions the most. The normative features of institutions are the consequence of social duties that are ethically guided and internalized, not only as a result of the law, but also as a result of behaviors that include conformity with broader societal ideals. Typically, organizational sociologists and cultural anthropologists investigate the cultural-cognitive aspects of institutions. Cultural cognitive aspects of institutions are the elements that encompass the common conceptions that make up the social reality of the society and the meanings assigned to these concepts, as well as the shared concepts, beliefs, and reasoning behind behaviors (Bolat and Seymen, 2006).

# 2.6. Institutional isomorphism mechanisms: determination of independent variables

Institutional isomorphic change occurs through three mechanisms, according to DiMaggio and Powell (1983): 1) coercive isomorphism, 2) mimetic isomorphism, and 3) normative isomorphism (DiMaggio and Powell, 1983). These three pressure
mechanisms (normative, mimetic, and coercive) that propagate institutional isomorphism cannot be distinguished experimentally. Each entails a distinct process, but as two or more, all three can function concurrently, and their effects are indeterminable (Mizruchi and Fein, 1999).

#### 2.6.1. Normative isomorphism

Normative pressures and the effects of professionalization are one of the causes of isomorphic organizational change. Professionalization is described as the collective endeavor of professionals to define working conditions and methods of doing business and to manage the production of producers in order to build a legitimacy and cognitive basis for their professional autonomy (DiMaggio and Powell, 1983). Professional efforts are not always totally successful since they have to compromise with the clients, bosses and regulatory actors who are not professionals in the professional field. The developments and expansions in the professions have occurred primarily among the administrators and specialized personnel of major enterprises. In addition, the increase in the level of professionalization of employees, whose futures are inextricably linked to the wealth of the organizations that employ them, has reinstated the distinction and dilemma between organizational commitment and professional commitment that distinguishes traditional professionals who dominate the old organizations. Nevertheless, different professions within a company may differ from one another and have similarities with their counterparts in other firms. Professionals, like organizations, can be vulnerable to coercive and imitative pressures (DiMaggio and Powell, 1983).

In two ways, professionalization is the source of isomorphism. One of them is dependent on formal education and the legitimization of the cognitive base revealed by university experts in the institutional sector. Another is based on the expansion and development of professional networks, in which new models are swiftly disseminated and adopted by organizations. Universities and institutions of vocational education are significant hubs for the formation of organizational norms among professional managers and their staff. Additionally, professional and commercial associations and chambers are significant means for creating and communicating normative principles on organizational and professional conduct. Such procedures generate a pool of replaceable persons with similar orientations and tendencies who hold comparable roles in various organizations. In this way, the existence of a common pool of persons with similar orientations and tendencies has the effect of overriding variances that may otherwise impact organizational behaviors. Recruitment in many organizational areas; through rapid recruitment of staff from firms in the same industry, educational institutions with a narrow scope, or through the use of similar promotion systems, for example, appointments from finance and legal departments to senior management levels, results in personnel filtering, a type of normative isomorphism mechanism. By selecting managers and key personnel from similar universities and filtering them based on similar characteristics, these professionals will tend to view problems and strategic issues in a similar manner, view the same policies, procedures, and structures as normatively acceptable and legitimate, and approach decisions in a similar manner. In addition to filtering employees, workplace socialization can also be beneficial as an isomorphic force component. Effective areas that contribute to the creation of professional socialization as an isomorphic force include trade association workshops, in-service training programs, consultant arrangements, and employer vocational school networks (DiMaggio and Powell, 1983).

The adoption of structures and thought systems that are regarded to be correct, such as structures and thought systems acquired through education, can be defined as an element of normative pressure and contribute to institutionalization by establishing a norm (Özen and Yeloğlu, 2016). In addition to consulting firms and professional educational institutions, certain professional behavior norms are established by consulting firms and educational institutions. For instance, business schools evaluate which approaches and techniques are superior for elucidating the tasks of finance, marketing, and human resources, and create particular application-related standards (Bolat and Seymen, 2006). By establishing legitimacy standards, the regulations created by the demand for professionalization are effective as normative pressures. Examples of these consequences include the standard practices and rules created by professional chambers for the practice of professions (Öztürk and others, 2019).

Consulting firms, educational institutions, management gurus, and enterprises that personally use specific strategies in the institutional field can generate normative pressure by building and disseminating a shared belief in the significance of a methodology. In addition, by adopting this strategy, firms can alter their structures to send a message that they are rational and modern to groups who are important to them (such as shareholders, consumers, or society as a whole), often beyond the technological advantage (Özen and Yeloğlu, 2016). Moreover, professional chambers, associations, and associations can exert normative pressure on firms to adopt particular structures and practices. During the 1990s, for instance, actors such as Tusiad and Kalder exerted normative pressure on other firms to embrace Total Quality Management (TQM) techniques (Özen and Yeloğlu, 2016).

As an example of the normative mechanism in organizational structure and practices, organizational adoption is more prevalent in multi-divisional organizational structures than technical terms. Thus, organizations can extend organizational change to the business domain by adopting the aforementioned change as a symbolic value rather than in technical terms. This example of normative isomorphism in the dissemination of multi-divisional organizational structures (multidivisional forms), which are adopted as a solution to reduce problems such as coordination, control, and transaction costs created by the diversification strategies followed by large companies in the institutional area with isomorphism mechanisms, can be used to teach and demonstrate this structure as a model, and thus this dissemination can be viewed as institutional factors (Özen and Yeloğlu, 2016).

Specialization, which contains two processes, is the source of normative pressures. One of these processes suggests that professionals with comparable training share a comparable worldview. Another involves the exchange of ideas between professionals in professional and trade organisations (Mizruchi and Fein, 1999).

The professionalization of management tends to advance when organizational areas are structured. This can occur formally and informally, creating a matrix for information flows among professionals and inter-organizational circulations of experts about centralized organizations and ubiquitous hierarchical statuses in the institutional sector. The centralization of these organizations in the institutional field as a result of the professionalization of management is a factor in the talks between the union and the employees. Identification of important organizations in the industry becomes a determining factor in union and worker talks, as well as in the determination of particular major organizations in the industry. The legitimacy and visibility granted to some organizations through grants and contracts may lead other competitive enterprises to mimic the structure and methods of a centralized key firm in order to acquire comparable funds and opportunities. Similarly, professional and

trade groups offer influential positions and spheres of influence to the employees of centralized organizations. Managers of prominent and centralized organizations can enhance their reputation and standing by serving on the boards of other organizations, cross-sector councils, and consultancy networks. Such organizations, which are highly centralized in the institutional area, are both active and passive models in this regard, and their structure and policies are imitated by other organizations operating in the same domains. As managers and employees in centralized companies seek to further their careers and secure their jobs, the decentralization of these organizations is strengthened. Aspiring managers seeking advancement in this regard may be exposed to forward-looking socialization regarding the norms and practices of the firms they aspire to join (DiMaggio and Powell, 1983).

#### 2.6.1.1. The effects of normative pressures on innovation

Pinho (2017) emphasized the literature studies that tend to categorize the institutional factors that may influence entrepreneurship and pointed out that there are a number of studies that emphasize the importance of cultural and social factors, while others emphasize the role of government programs and government policies. Pinho (2017) assigns different weights to cultural and social norms, government programs and government policies, and basic and advanced education in terms of their impact on entrepreneurship. Results reveal that the relevance of both aspects differs between nations driven by factor (or production) and innovation. Except for education and training, the relevance of all other institutional variables was demonstrated to be distinct by the results. The importance of basic and postsecondary education differs between factor-driven and innovation-driven nations, which is significant because it reflects cognitive structures, social knowledge, and the frames through which individuals and organizations understand information in a specific nation. The significance of a country's citizens' knowledge and abilities, as well as their collective understandings of reality, differs between factor-driven and innovation-driven nations (Pinho, 2017). Yang (2015) conducted a study with the intent of adopting institutional theory to explain innovation outputs. According to the study's findings, hospital inventive skills are favorably influenced by institutional pressures. Institutional theory is highlighted in terms of the influence of professional associations on an organization's legitimacy and performance in its institutional context (Yang, 2015). While coercive isomorphism indicates that some innovations are involuntary, normative isomorphism is the consequence of learning and innovation that occurs voluntarily. Therefore, voluntary isomorphism suggests that professional agents play a vital role in learning and innovation. In other words, learning and innovation are dependent on professional agents who bring a body of knowledge to companies and, through their access to external knowledge, offer chances for organizations to develop knowledge. Since institutional isomorphism serves as a tool in the process of gaining legitimacy, this mechanism will also serve as a vehicle for developing innovative organizational skills. Consequently, the more institutional pressures that firms perceive, the more opportunities they will have to improve their inventive capacities. The level of perceived institutional demands of the professional knowledge worker is found to be positively connected to the innovative capacities of the company (Yang, 2015).

In terms of exerting influence on business behavior through positive counsel, normative pressures, which typically originate from professional organizations and social groupings like industry associations, differ from regulatory pressures (Ning, Jie and Li, 2022). Ning, Jie and Li (2022) discovered that when environmental normative demands from non-governmental organizations such as business associations increase, so do green innovations. In comparison to regulatory demands, the normative pressures coming from these professional groups are more likely to result in reputational and competitive advantage for enterprises; hence, firms aim to implement innovative techniques voluntarily (Ning, Jie and Li, 2022). Professional organizations and other focal actors that set appropriate behavior and standards for group members are the actors in the institutional field that promulgate standards and norms. And organizations strive to comport themselves in accordance with these widespread standards and norms among enterprises functioning in the same institutional field. Professional groups, such as non-governmental organizations, can stimulate innovation by supplying the information required to produce innovative and disruptive ideas and by giving sources of inspiration for value-creating strategies (Berrone et al., 2013). Berrone et al. (2013) studied whether larger normative demands emanating from professional organizations make environmental innovations more appealing to corporations and discovered that as normative pressures increased, so did the innovations. Vermeulen, Büch and Greenwood (2007) explain how established arrangements can constrain market structure and inhibit innovation spread. Although it is essential for innovations that the process of market creation be supported by existing institutional arrangements, aggressive opposition from professional organisations might impede the development of a new market. Professional associations can be the elements of these institutional frameworks that actively inhibit the transmission of innovations and limit change (Vermeulen, Büch and Greenwood, 2007).

## Proposition 1: Professional norms may have both positive and negative effects on organizations' propensity to innovate.

The mandatory components of social, professional, and organizational interaction are institutional norms, upon which organizational and individual behavior models are built. On these normative systems, such as values and norms, members' work patterns, procedures, and rules for controlling production output are established in order to establish fundamental recognition and legitimacy. Norms are the observable and regulated conduct of members with reference to organizational expectations and demands. Norms evolve gradually and informally as members of the institutional field discover which behaviors are required to function more successfully. It has been discovered that institutional rules promote information sharing, which is a crucial aspect of developing learning societies and knowledgeintensive sectors for innovation (Wang, Tseng and Yen, 2014). The social network and shared goals among organizational members have direct effects on the attitude and subjective norm about information sharing, as well as indirect effects on the intent to share knowledge (Chow and Chan, 2008). In particular, people who sense stronger social pressure to share creative knowledge have a more favorable attitude toward knowledge sharing (Chow and Chan, 2008; Wang, Tseng and Yen, 2014).

Proposition 2: Shared values and norms may influence the innovation propensity of organizations both positively and negatively.

#### 2.6.2. Coercive isomorphism

These are the formal or informal pressures exerted upon the organizations by their affiliated organizations. These pressures can be imposed by other organizations to which organizations are linked, as well as by cultural expectations within the society in which the organization functions. These pressures can be interpreted as coercion, persuasion, or invitation to particular communities or unions. In certain instances, organizational changes are a direct result of government agencies, officials, or audits. Examples include implementing new environmental waste technologies by manufacturers to comply with environmental regulations, hiring accountants to meet tax law requirements, or hiring affirmative action employees to reject discrimination claims, and schools paying attention to private students, hiring special education teachers. The presence of a shared legal environment can influence the behavior and structure of organizations. This is illustrated by the effect of rationalized contract law, which mandates the organizational controls required to fulfill legal obligations. Other technical and legal requirements by the state, such as changes in the budget cycle, financial reporting requirements that ensure eligibility for receiving contracts or funds, also affect organizations in similar ways in terms of organizational structure and behavior (DiMaggio and Powell, 1983).

Furthermore, the direct imposition of standard operating procedures, lawful regulations and structures can occur outside the realm of government (DiMaggio and Powell, 1983). As holding companies expanded in size and breadth, it became common knowledge that subsidiaries were subject to standardized reporting procedures, even if standard performance criteria were not always applied. In this context, subsidiaries can adopt accounting processes, performance evaluations, and budget plans consistent with the policies of the parent firm. These monopolistic forces may engage in common tactics of exerting pressure on companies that utilize diverse service infrastructures, such as telecommunications transportation, which are typically supplied by monopolistic firms (DiMaggio and Powell, 1983). The imposition of organizational models on dependent organizations can be observed both explicitly and in a less explicit manner (DiMaggio and Powell, 1983). In order to secure assistance from donor organizations, many neighborhood organizations in urban neighborhoods that are tied to participatory democracy are hierarchically organized. Organizational hierarchies are one illustration of these evolving processes. In this way, the expansion of the state, the consolidation of capital, and the coordination of philanthropy also result in the homogenization of organizational patterns via direct authority relationships (DiMaggio and Powell, 1983).

For organizations to display such institutional isomorphism as a result of coercive pressures from the institutional environment, there must be absolute power differences and reliance across organizations that copy the structure, behaviors, and strategies of other actors. Organizations that are subject to pressure from the state, regulatory agencies, and other significant organizations in the institutional field exhibit institutional isomorphism as a result of this absolute power disparity and dependence. While some pressures are state-based pressures in the form of the use of legal force, such as requiring industrial enterprises to have equipment to prevent air pollution, other pressures may be applied by other active actors in the institutional field, such as some large industrial enterprises and their affiliated suppliers, to change and adopt certain policy procedures, instructions, and techniques (Daft, 1998, p. 542).

One of the areas in which colleges play an active role, for instance, is coercively influenced by the common legal and state-based environment of formal or informal rules, laws, and consequences (Dey, Milem and Berger, 1997). The state's role in providing financial aid and research funding, as well as university regulations, provide financial support for expectations of accreditation bodies, discrimination and affirmative action, and other regulatory legal decisions regarding outsourced processes, thereby establishing a network for rule setting, monitoring, and enforcement (Scott, 1995, p. 35). In this sense, educational institutions and universities live in a complicated legal and political context in which they must conform with the expectations, practices, and laws of a vast array of diverse interest groups (Dey, Milem and Berger, 1997).

Organizations frequently change their structure and functioning (Bolat and Seymen, 2006) to remain outside the legal framework brought by the institutional environment in which they are located and to be accepted by the institutional environment; they frequently do not consider the effect of this corporate coexistence on the effectiveness and performance of organizations (Crank, 2003). In organizational coexistence resulting from coercive constraints, organizations focus on the values represented by other influential institutional environmental actors in order to sustain their presence and obtain legitimacy from their institutional environment. In other words, rather than examining the impact of changes in organizational structure and behavior on organizational performance caused by the coexistence of organizations, the extent to which actors with high influence in the

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institutional field reflect the values they represent is frequently examined (Crank, 2003; Bolat and Seymen, 2006).

Included as two elements of pressure that induce coercive isomorphism are pressures from other organizations on which the organization depends and, more generally, the emphasis on meeting cultural expectations from the environment (Mizruchi and Fein, 1999). They can undergo structural change if they are compelled to conform to the cultural demands of consumers, suppliers, or competitors (Fligstein, 1985; Mizruchi and Fein, 1999). The coercive isomorphism is comparable to the formulations of the resource dependence paradigm, in which organizations are restricted by other resource-dependent actors. Such constraints may include pressures to match an organization's structure with the demands of influential actors. Coercive isomorphism combines inter-organizational power and the belief that organizations' actions can be constrained by the actions of other, more powerful entities (Mizruchi and Fein, 1999).

#### 2.6.2.1. The effects of coercive pressures on innovation

Empirical research in the literature have indicated a favorable correlation between regulatory pressures and firm innovation (Berrone et al., 2013; Moyano-Fuantes, Maqueira- Marin and Bruque- Camara, 2018; Garrone, Grilli and Mrkajic, 2018; Cai et al., 2020; Kammerer, 2009). According to these findings, environmental innovation will rise proportionally as environmental regulatory demands increase (Berrone et al., 2003). It has been discovered that corporations make innovation investments in order to comply with government-generated environmental rules, and that rigorous environmental regulations influence both product and process energy efficiency operations of firms (Garrone, Grilli and Mrkajic, 2018). According to Radnejad, Vredenburg and Woiceshyn (2017), enterprises' adoption of open innovation methods is influenced by institutional factors in the form of environmental rules.

Xie, Boadu and Tang (2021) investigate the connections between government subsidies and innovation performance, and their findings suggest that government subsidies improve the innovation performance of businesses. The allocation of government subsidies enhanced enterprises' efficiency disadvantages in relation to innovative activities, according to the findings. In response to the stimulating effect of government subsidies, businesses engage in innovation activities, hence enhancing the innovation performance of the company (Czarnitzki and Lopes- Bento, 2013; Wei and Liu, 2015; Xie, Yuan and Huang, 2017). As the specific financial package that is granted to businesses for their special activities, such as innovation activities, government subsidies encourage the R&D activities of businesses and hence favorably affect the innovation decisions of businesses (Hewitt- Dundas and Roper, 2010). Also found to be favourable to innovative entrepreneurship are government policies based on solid property rights, a well-functioning legal system, free and open markets, and stable monetary arrangements (Bradley et al., 2021).

Li and Atuahene-Gia (2001) examined the relationship between product innovation strategy and institutional support. Their research revealed that institutional support moderates the association between the employment of a product innovation strategy and the performance of new technology businesses. Institutional support is the degree to which administrative entities, such as government agencies, provide assistance to businesses in an effort to mitigate the negative impacts of inadequate institutional infrastructure. The degree of assistance from government institutions as viewed by the venture's managers is considered institutional support from government institutions (Li and Gia Atuahene, 2001). Institutional context can have detrimental consequences on the innovation and investment propensities of businesses. Local belief systems are shaped by local experiences and values, which are difficult for outsiders to access. This explains the unwillingness to engage with legislative measures to enhance productivity (Martin et al., 2015). This is what institutional theorists mean when they say that the adoption of new ideas cannot occur unless the practice acquires sufficient perceived worth, be it symbolic or economic. Martin et al. (2015) found a variety of characteristics that could influence the inclination of local businesses to innovate and invest in sustainable agriculture methods. These are structural variables such as land ownership rights and other resources, such as legal and administrative systems, as well as belief systems and political ties (Martin et al., 2015).

# **Proposition 3: Governmental coercion may have both positive and negative effects on the propensity of firms to innovate.**

Literature-based empirical investigations demonstrate that coercive pressures exerted by powerful actors have a favorable impact on the firm's innovations (Waggoner, Neely and Kennerly, 1999; Dubey et al., 2017; Wang et al., 2018; Abayomi et al., 2020). The institutional pressures of other organizations and the elements resulting from the balance of these power interactions have favorable influence on the innovation outputs of corporations (Waggoner, Neely and Kennerly, 1999; Dubey et al., 2017). Numerous studies indicate that firms innovate their processes and managerial practices in response to such coercive forces related to the pressures of other companies (Dubey et al., 2017; Wang et al., 2018; Abayomi et al., 2020). The implementation of performance evaluation systems (Dubey et al., 2017), the adoption of modular product production (Wang et al., 2018), and the incorporation and adoption of various technological applications (Abayomi et al., 2020) are examples of innovation adoptions caused by the coercive pressures exerted by powerful firms on the other dependent firms. Bocquet and Bubouloz (2020) shown that various organizations, such as clients or suppliers, may have sufficient strength to mandate the adoption of new and innovative managerial techniques across enterprises. In addition to active external search techniques, they discovered that coercive forces and a quest for legitimacy also contribute to management innovation (Bocquet and Bubouloz, 2020).

Zhang et al. (2019) highlighted prior studies that have neglected the institutional environment effects on mechanisms through political ties and their impact on product innovation performance of enterprises. Political ties are the processes that increase a company's network and, thus, its political legitimacy, while also enabling the company to get institutional backing for acquiring market opportunities and government resources (Zhang et al., 2019). The empirical findings indicate that institutional support mediates the effects of political relationships on the enterprises' product innovation performance. Companies rely on political ties to acquire institutional support, and research indicates that institutional support improves product innovation success (Zhang et al., 2019). Yiet al. (2018) examined the impact of institutional logic on innovation drivers in highly regulated contexts with high levels of state ownership and powerful government institutions. State ownership positively moderates the effects of R&D intensity on innovation performance, according to their examination of the effect of state ownership on the innovation performance of developing market firms (Yi et al., 2018). Government as a stakeholder of SOEs (government as a key shareholder in state owned enterprises) exerts institutional pressures on corporations that might alter the motivations and capabilities of firms for the realization of innovations (Yi et al., 2018).

## Proposition 4: Innovation propensity is influenced positively or negatively by coercive pressures exerted by other organizations.

#### 2.6.3. Mimetic isomorphism

Not all institutional isomorphism is simply attributable to coercive authority; uncertainty can also be a potent driver that drives organizations to copy. When organizational technologies are inadequately understood and goals are ambiguous, the environment generates symbolic uncertainty, and organizations may look to other organizations as models. Modeling is a reaction to ambiguity. The modeled organization may be unaware that it is being used as a model, or it may not wish to be replicated. Involuntary modeling can be disseminated through employee terminations, staff transfers, and chambers of commerce and consultancy businesses. As long as they think that similar organizations within the institutional field are more effective and acquiring legitimacy, organizations prefer to mimic these organizations (DiMaggio and Powell, 1983).

Regardless of the technical usefulness of an application or innovation, an organization might model itself after other organizations to attain legitimacy or social conformance that grants status within a larger social framework (DiMaggio and Powell, 1983; Teo, Wei and Benbasat, 2003). Organizational decision makers who face problems with uncertain solutions or technologies may submit to imitative pressures from the environment in order to reduce search costs, limit trial costs, or avoid the dangers that those who act first would face (Teo, Wei and Benbasat, 2003). Sociological research on threshold models reveals that decisions to engage in a certain action depend on the perceived number of individuals who have already engaged in this behavior (Teo, Wei and Benbasat, 2003). Also, by avoiding less sensitive action on behalf of other organizations in the sector, they will adhere to the actions that have been justified by the actions of other organizations in the sector (Teo, Wei and Benbasat, 2003). If a sector is perceived as a less coherent trading partner within the context of larger or less technologically advanced competitors and other organizations in the industry, it will be necessary to avoid the potential of

modeling in order for adoption and innovation to be greater (Teo, Wei and Benbasat, 2003). In addition to the inclination to model similar companies that undertake these measures by drawing cues from collective actions, organizations have a tendency to imitate the conduct of organizations they regard as being particularly effective. Therefore, in the context of the adoption of innovation as an organizational action; the perception by other organizations that innovation brings success to organizations who adopt it, other organizations will tend to apply similar innovations as well (Teo, Wei and Benbasat, 2003).

When the acts of organizations within their own population become more conspicuous than the actions of organizations within other populations, organizations begin to imitate the actions of organizations within their own population. According to the organizational ecology theory, which assumes that organizations in an industry form a population, organizations imitate the behaviors of other organizations within their industry (Haveman, 1993). In terms of structural, strategy, resource, and constraint conditions, companies prefer to emulate other organizations in the same population that are in comparable circumstances. Comparable-sized organizations have similar structures and strategies, and are shaped by the same environmental sources and limitations (Hannan and Freeman, 1977; Haveman, 1993). Organizations tend to imitate the methods of organizations whose dimensions are comparable to their own and whose motions they mirror (Haveman, 1993). In addition to the focus and ubiquity of practice and activity in the organization's industry, the perceived success of organizations adopting the practice in the organization's industry also contributes to the development of mimetic pressures (Teo, Wei and Benbasat, 2003; Haveman, 1993). Organizations copy the successful practices of other organizations within their demographic or those that they consider to be successful. Although there is evidence that the activities of highly visible and prestigious organizations have an impact on other organizations, it is difficult to determine which organization has the highest visibility, prestige, and success. Although various criteria such as participant satisfaction, business volume, output quality, stability, production efficiency, growth, and profitability are used to measure organizational performance, it is evident that organizations with a higher profit margin are more successful than those with a lower profit margin. Therefore, the presence of very profitable organizations will legitimate the market vis-à-vis other organizations in the population. Therefore, the presence of very profitable organizations will legitimate the market in the eyes of other companies in the population. Another factor in which firms are deemed successful and legitimate the market is organizational scale, which motivates other organizations in the population to imitate the so-called successful businesses. In this regard, the size of an organization and its profitability are two measures of its success (Haveman, 1993).

The officials of the Japanese imperial government at the end of the nineteenth century, the courts in France, the army, and the police modeled the apparently effective new western government projects. As an example of following modeling, American companies attempted to adapt successful Japanese models in order to address severe productivity and people issues within their organizations. In fact, organizations replicate all of these activities as a ritualistic aspect of these advancements; at the same time, they adopt these innovations to strengthen their legitimacy and at least appear to be attempting to better working conditions. The majority of uniformity in organizational systems, for instance, might be created by a relatively modest variation that can be selected from them, notwithstanding the pursuit of substantial diversity. In all sectors of the business, new companies are frequently built after their predecessors, and managers deliberately seek out models to emulate. Large corporations can be proven to have mimetic processes in their organizational structures by extending multiple organizational models to their areas by selecting consultancy firms. Great local advice of a consulting firm with a functional structure of a television station, a massive metropolis in the design of public multi-part to make the transition to a new structure, although its effectiveness is questionable managers in the new structure; this structure is the organization of regularly dealing with for-profit companies because of the belief that will carry a powerful message, one of the examples of the modeling is done. In the institutional realm, organizations prefer to model themselves after organizations that they perceive to be more legitimate or successful. The widespread, simultaneous ubiquity of some structural arrangements in the institutional field may indicate a greater likelihood of universality of imitation processes, rather than proof that adopted and imitated models boost productivity (DiMaggio and Powell, 1983).

As one of the causes for the emergence of mimetic processes, individuals constantly interpret the physical environment around them based on previously formed references and frames; thus, this circumstance influences perception and behavior. For instance, socially constructed universities and educational institutions

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have their own constituent rules that significantly influence the attitudes and actions of individuals. Additionally, in severely uncertain contexts, the higher education institution helps individuals in organizations overcome ambiguity by exerting an appropriate mimetic pressure from mental models that mirror the organizational climate (Dey, Milem and Berger, 1997).

While the first organizations to realize change in the institutional field do so in accordance with their economic interests, organizations that adopt change later do so because it is believed to contribute to the success of the organization and is viewed as an indication of doing things in a modern, successful, and correct manner. Thus, from the organization that first accepts change in a technical sense to the organization that adopts change for its symbolic value in addition to its technical value, institutionalization arises via mimetic co-ordination processes (Özen and Yeloğlu, 2016). For instance, major organizations' diversification techniques have been implemented as answers to difficulties such as follow- up- coordination, control, transaction cost reduction, and multi- divisional form of multi- party organization. When they independently implement these techniques, they spread to other companies. Institutional reasons include the fact that corporate management serve on the boards of other organizations that have adopted a multi-division structure. In contrast to organizations that embrace multi-party arrangements early on, companies who adopt it later do so because they believe the change would benefit them and improve their reputation, as opposed to attempting to solve a management issue (Özen and Yeloğlu, 2016).

Organizational structure, joint ventures, and mergers are methods to the imitation isomorphism mechanism (Özen and Yeloğlu, 2016; Bolat and Seymen, 2006). In addition, some techniques susceptible to imitation isomorphism processes, such as restructuring, benchmarking, just-in-time production system, and comprehensive quality management, can be adopted by companies without regard to approach and technological efficacy and efficiency as a priority (Bolat and Seymen, 2006).

Imitative isomorphism is a response to ambiguity. When there is no clear plan of action, it is believed by organization executives to be the most effective method for emulating organizations that they see as successful from other organizations (Mizruchi and Fein, 1999). In their study, Schoonhoven, Eisenhardt and Lyman (1990) evaluated the speed with which newly founded companies introduced their initial revenue-generating items to the market and underlined that new companies face incentives to model themselves after other firms in their industry. They noted that when a substantial number of new companies founded in the same year speed the release of their products, this creates mimetic pressures to imitate the research and development productivity of the enterprises studied (Schoonhoven, Eisenhardt and Lyman, 1990; Mizruchi and Fein, 1999). Aside from this, it may be difficult to identify the operational definitions of the pressure factors in the structural and behavioral isomorphism of an organization, particularly in empirical studies. In concluding that the observed change in organizations is the product of imitative pressures, it is believed that change has a high rate of adoption among organizations and that change occurred through voluntary and self-aware imitative isomorphic processes in addition to other pressure aspects (Mizruchi and Fein, 1999).

#### 2.6.3.1. The effects of mimetic pressures on innovation

Andrews et al. (2021) found that the adoption of shared senior management teams as a management innovation is influenced by mimetic pressures coming from the spread of policies throughout organizational populations. It is discovered that shared senior management teams are implemented as a management innovation in response to mimetic institutional constraints to enhance organizational capacity in resource- constrained, politically risk- adverse governments (Andrews et al., 2021). Huang et al. (2022) investigated the impacting mechanism and boundary conditions of technological knowledge coupling on green innovation in manufacturing firms and discovered that mimetic pressures moderate the relationships between new and existing technological knowledge coupling and green innovation in manufacturing firms. It is discovered that mimetic pressures inspire extended supply chain practices for government-initiated energy conservation and emission reduction programs for sustainable production and consumption (Zhu, and Geng, 2013). Bansal and Roth (2000) aimed to assess the ecological responsiveness of firms and the variables that may contribute to high responsiveness. According to their research, when field cohesiveness is low, competitors do not perceive the firm's ecological responsiveness as a competitive threat; hence, they are less likely to respond to the firm's initiatives and more likely to imitate it in the current institutional environment (Bansal and Roth, 2000). Scholars have researched the effect of mimetic pressures on green

innovations and concluded that legitimation serves as a strong impetus for ecologically responsible initiatives and that mimetic pressure is a significant driving force in these projects (Bansal and Roth, 2000; Huang et al., 2022).

**Proposition 5: Mimetic pressures have a positive or negative effect on organizations' propensity to innovate.** 



#### **CHAPTER 3: THEORETICAL FRAMEWORK: INNOVATION**

#### 3.1. Defining innovation

According to the Oslo Guide, innovation is the creation of a distinct, new, or considerably enhanced product or process in internal practices, workplace organization, or external relations, as well as a previously unapplied marketing strategy or a new organization. Thus, it is defined as the implementation of new techniques (OECD, 2005). Utilizing science and technology, innovation is the transition of an idea in terms of theory, action, and consequence into a commercial advantage. As one of the most important drivers of innovation, invention can be described as the transition of fresh ideas and technical aspects into elements with uncertain economic value. In this aspect, inventions are required for innovation to be exposed, but not all inventions qualify as innovations. Innovation refers to the process of transforming the activities and outcomes proposed by invention into commercially viable products. In other words, innovation refers to the procedure that bridges the gap between invention and commercialization. In this sense, innovation is more than a simple and limited renewal event; it encompasses processes beginning with the theoretical stage of renewal. Invention is a part of the innovation process. Innovation is a process that requires and incorporates the characteristics of commercial inventions (Bickes, 2011).

#### 3.2. Dynamics and measurement of innovation

Some innovation-studying scientists have considered innovation as an outcome. They have also examined the conceptual, structural, and process-based conditions under which innovation can emerge. Some scientists who have studied innovation have viewed this idea as a process and examined the topic from the standpoint of how innovation emerged, matured, and became an integral part of businesses' routine activity (Damaanpour and Gopalakrishman, 1998).

In the conception of innovation that encompasses both the process and the outcome, both novelty and the terms of use gain relevance. This innovation refers to the creation of a new production method based on an invention, scientific discovery, or production or management. Novelty refers to an invention, scientific discovery, or the creation of a new industrial technique based on production or management. In other words, innovation encompasses all phases leading up to the discovery of a

novelty derived from both internal and external sources and the marketing of this novelty (Biçkes, 2011). The distinction between invention and innovation is as follows: inventions are genuine discoveries that result from fundamental scientific or technological study, whereas innovations are not limited to a single industry. Moreover, innovations are an enhanced form of inventions. Innovation is described as the utilization of inventions that arise as bright ideas in the development of new products and services; emphasis is now placed on the distinction between invention and innovation (Hjalager, 2002).

Innovation is a far broader idea than invention; innovation is not synonymous with invention. Innovation is a process that entails the introduction of a new concept and its introduction to the market. Therefore, innovation refers to a procedure that begins with creativity and ends with commercialization (Freeman and Engel, 2007). Innovation comprises not just idea generation, but also the procedures by which marketed ideas are developed (Aksel, 2010). Innovation is described in this context as a process that encompasses all stages of the birth of a creative concept, its commercialization and delivery to the final consumer, as well as its continuation and diffusion (Aksel, 2010). According to Porter (2000), innovation is defined as the utilization of newly generated information to raise the value-to-cost ratio of a good or service (Aksel, 2010).

#### 3.3. Types of innovation

Product innovation, process innovation, marketing innovation, and organizational innovation are the four categories of innovation used to define the notion of innovation in the Oslo manual. Because they are closely tied to the concept of technological developments, product and process innovations are classified as technological innovations, whereas marketing and organizational innovations are classified as non-technological innovations (OECD, 2005).

Product innovation is described as the introduction of novel, significant, and observable enhancements to the product's use or characteristics. Technical features, parts of the product, and the product's material or functional characteristics can all be improved in meaningful and evident ways. While releasing a brand- new, different product is referred to as product innovation, modifying the product's use to improve its performance or altering the product's parts, materials, and features are also referred to as product innovation (OECD, 2005).

In contrast, process innovation refers to the creation of new or significantly enhanced production and distribution systems. These modifications may involve manufacturing procedures, machinery, or software. In process innovations, the objective is to lower unit costs for manufacturing and distribution, improve quality, or manufacture and distribute new and enhanced products. New production methods include production processes, modifications in equipment and software, the installation of new automation equipment, and the use of computer-assisted production methods. Innovations in distribution methods encompass all improvements and innovations in raw material procurement and final product distribution (the introduction of a bar-coded or active RFID: radio frequency identification items - tracking system is an example of a new delivery method) (OECD, 2005).

Innovation in marketing is the application of new marketing techniques to the processes of product design, packaging, placement, promotion, and price. The primary objective of marketing innovations is to better respond to client wants, to open up new markets, and to improve sales by positioning a new product on the market. The distinction between marketing innovation and changes in the firm's marketing method is that marketing innovation employs marketing methods that the firm has not before used (OECD, 2005).

Organizational innovation is the implementation of new organizational approaches in company practices, in the organization's external relations, or in the organization's workplace. In this context, organizational innovations are defined as organizational applications designed to reduce administrative and transaction costs, increase workplace satisfaction (and thus labor productivity), reduce procurement costs, and improve firm performance in acquiring non-tradable assets (such as information). Moreover, mergers and acquisitions are not considered organizational approach during a merger or acquisition, this can be regarded an organizational innovation. In most cases, organizational innovation is implemented in three areas: business practices, workplace organization, and external interactions. As examples of organizational innovation's use in the context of business processes, applications for learning and sharing within the organization are provided. In this sense, organization innovations encompass topics such as encoding learned information and making it accessible from any location, education systems, lean manufacturing, quality

management systems, training systems, production supply operations, supply chain management systems, and business reengineering. Issues pertaining to the implementation of organizational innovation in the context of workplace organization include the methods of distributing responsibilities and decision-making among employees, practices of delegating authority, and structuring activities to encourage employee participation in decision-making. As part of organizational innovation, the areas in which the organization determines new methods for its external relations are defined as relations with other firms or public institutions, organizing new methods of integration with suppliers, outsourcing or subcontracting pricing procedural processing, distribution, or auxiliary processing stages (to be outsourced / outsourcing) (OECD, 2005).

#### **CHAPTER 4: RESEARCH DESIGN AND SETTING**

#### 4.1. Method of research

The purpose of the research is to gain an in-depth understanding of the factors that influence the innovation propensities of companies. In this direction, qualitative research methodology guides the study. Before the research, semi- structured interviews were done with company owners and managers to examine in-depth opinions on the inhibitory and facilitating effects stemming from the institutional environment on the innovation tendencies of companies. Instead of identifying the factors and hypothesizing their relationships, exploratory research is undertaken to identify the inhibiting and enabling effects of the institutional environment on the innovation tendencies of interviews were evaluated using content analysis, a qualitative analytic technique.

Prior to the research, rather than defining the variables and examining the relationships between them, it is intended to determine whether companies have innovation tendencies related to organizational processes in production, operation, and management functions that enable the attainment of sustainable competitive advantages. To get an in-depth understanding of the institutional elements that influence the innovation propensities of businesses, this study used a qualitative research methodology. The purpose is to employ semi-structured interviews to elicit replies to questions about "what is happening" in company processes and the reasons why innovation can or cannot be applied in these processes.

#### 4.2. Research setting

The Turgutlu Brick and Tile factories constitute one of the most densely populated industrial locations in our country. Due to the great quality of the raw material for brick and tile factories in Turgutlu, the district of Turgutlu produces bricks of the best grade. Brick and tile factories, which are concentrated in Turgutlu, are the district's most important industry, and the brick and tile industrial sector, which is labor-intensive, is the district's primary source of income. The manufacturing capability of the Turgutlu brick and tile factories accounts for approximately 15 percent of our nation's yearly clay product output. Production intensified in Turgutlu after 1950. The market share of the bricks produced in Turkey between 1960 and 1980 was approximately 50 percent. In Turkey, the Turgutlu Brick brand was established during these years. Between 1980 and 2016, the market share of brick and tile in Turkey was approximately 17%. The neighborhood still contains 20 brick and tile manufacturers. Thirteen of these factories are association members. Daily manufacturing is around 2 million units, and monthly production is 60 million units. Together with its subsidiary businesses, the brick and tile industry in Turgutlu is a major industry. There are roughly 2500 people employed in the brick-tile industry. Considering the subindustries, the brick and tile business provides a living for around 10,000 workers (based on statistical data provided by Turgutlu Brick and Tile Industrial Association).

Looking at the growth trends of the ready-mixed concrete industry, the industry grew steadily until 2017 and reached its peak output level of 115 million m<sup>3</sup> per year in 2017. In 2018, the construction industry had a severe decrease, and this trend continues in 2019. With the 2019 production value, a decade has been returned. In 2020, it reached a spectacular 95 million m<sup>3</sup> with a significant growth. The readymixed concrete industry performed significantly better than the construction industry in 2020. In this way, along with the volume increase in 2020, the number of companies and facilities has increased significantly. In 2020, the number of 542 ready-mixed concrete companies and 1032 facilities, according to estimates. The approximate manufacturing capacity for ready-mixed concrete is 234 million m<sup>3</sup>. Given that this capacity has not risen substantially over the past few years, the capacity utilization rate was 50% even in 2017, the peak year. In terms of output, the industry is observed to have an excess capacity. In terms of regional production capacities for ready-mixed concrete, Marmara Region ranks first with 59 million m<sup>3</sup> while Aegean Region ranks fourth with 34.1 million m<sup>3</sup>. In this regard, the regional production rates for ready-mixed concrete in 2021 have been established to be 30% in the Marmara Region and 12% in the Aegean Region. In 2018, there were 978 ready-mixed concrete businesses, followed by 976 in 2019 and 974 in 2020. Similarly, while the number of employees in the industry was calculated to be 42,177 in 2018, it is evident that the number of employees declined substantially in 2019. The number of employees increased from 31,020 in 2019 to 33,736 in 2020 (Association of Ready-Mix Concrete, 2021).

#### 4.3. Research sample

The research sample comprises of companies engaged in the brick tile and ready-mixed concrete industries in the provinces of Izmir and Manisa. Due to the complexities of the study's topic and the importance of gaining a thorough grasp of it, I used purposive sampling in my research. Purposive sampling approaches permit in-depth examination of circumstances that are believed to be rich in information and beneficial for examining and interpreting facts and events. Purposive sampling is used to determine whether diverse conditions in a very small sample share common and shared phenomena. In light of this variability, it enables researchers to identify the various dimensions of the issue (Yıldırım and Şimşek, 2018).

During my research, I conducted 18 in-depth interviews with executives and owners of companies in Turgutlu and Izmir that operate in the brick and tile and ready-mixed concrete sectors. While eight of the eighteen interviews were performed with companies in the brick and tile industry, ten were conducted with companies in the ready-mixed concrete industry. The field research began on August 29, 2019 and completed on November 17, 2019.

I established an interview protocol prior to the interviews, which includes;

• what to say at the beginning of the interview to introduce myself, the study's content, and the subject of the interview,

• ensuring the participant's anonymity and requesting permission to record the interview,

• a brief conversation prior to the interview to establish rapport and build trust with the participant,

• initiate the interview, interview questions, and probing inquiries,

• elicit personal experiences, stories, and sentiments about the interview subjects from the participant,

• close the interview and determine what to say at the conclusion,

• inform the participant and acquire their consent that I may contact them again if more opinion or information is required.

Also included in the interview protocol were instructions on how to take field notes and record my own feelings and observations. After drafting the interview protocol, I began contacting prospective participants and scheduling their interviews. To capture all facets of the subject; to enrich the data I intend to collect; and to ensure diversity, I designed my sample to be well-diversified in terms of:

- age range: managers and company owners from distinct age groups,
- firm structure: multi-partner, single-partner, family business or else,

• firm size and firm age: large- scale or small- scale firms functioning in the sector for many years, firms of varying sizes that are relatively new to the sector in comparison to other well-established firms (descriptive information about the sample is supplied at the end of this section in Table 1).

All of my interviews were conducted in factories or production facilities. I preferred conducting interviews in factories or production facilities because it allowed me to observe my interviewees in their organisational setting. Due to the participants' time constraints, I did several of the interviews over the weekend or after work. However, I also conducted these interviews at factories or production facilities in order to see my participants in their organisational settings. I conducted interviews at locations where I could be alone with the participants; thus, the majority of interviews took place at the offices of executives and company owners. Some interviews were held in the meeting room, but in these instances, I also conducted interviews with the participants individually. Occasionally, the interviews were interrupted by ringing phones or staffers entering the room to collect signatures. During these instances, I paused the tape recorder and waited before putting it back on and continuing the interviews with a reminder of where we left off. During the interviews, some participants spoke about the problems they had throughout their careers, some discussed their retirement plans, and still others mentioned their challenges in encouraging their children to pursue professions in this field. The fact that the participant provided instances from their own life in response to questions regarding their experiences, emotions, and recollections led to the conclusion that I produced a pleasant and trustworthy interview setting by directing the interviews appropriately. I arrived for the interviews at least one hour early so that I could observe the factory and manufacturing environment. I sat and drank tea while conversing with the employees. I was invited to locations in which a large number of employees ate together. I shared a meal with them. During all of my observations, I had both general and sector-specific interactions with the personnel. I did not leave the factories or production facilities when the interviews concluded; instead, I stayed longer and snapped images with permission. After leaving factories or production facilities, I had at least a half-hour of alone, during which I read my field notes and recorded my own thoughts and emotions. These notes also included a summary of the interview regarding the participant's appearance and behavior, as well as nonverbal cues and mimics. I transcribed the interviews that evening or the next day following the conclusion of each interview.

	CODE			INTERVIEW		AGE
NUMBER	NAME	SECTOR	GENDER	DURATION	POSITION	RANGE
1	RM, I1	Ready Mixed Concrete	Male	51 min	Executive	50-60
2	RM, I2	Ready Mixed Concrete	Male	27 min	Owner	40-50
3	RM, I3	Ready Mixed Concrete	Male	42 min	Owner	40-50
4	RM, I4	Ready Mixed Concrete	Male	1 hour 17 min	Owner	50-60
5	RM, I5	Ready Mixed Concrete	Male	1 hour 14 min	Executive	40-50
6	RM, I6	Ready Mixed Concrete	Male	1 hour	Executive	40-50
7	RM, 17	Ready Mixed Concrete	Male	1 hour 27 min	Executive	50-60
8	RM, 18	Ready Mixed Concrete	Male	1 hour 20 min	Executive	40-50
9	RM, 19	Ready Mixed Concrete	Male	1 hour 20 min	Executive	50-60
10	RM, I10	Ready Mixed Concrete	Male	1 hour 20 min	Executive	50-60
11	BT, I1	Brick and Tile	Male	52 min	Owner	60-70
12	BT, I2	Brick and Tile	Male	54 min	Owner	40-50
13	BT, I3	Brick and Tile	Male	1 hour 27 min	Executive	60-70
14	BT, I4	Brick and Tile	Male	50 min	Owner	70-80
15	BT, I5	Brick and Tile	Male	1 hour 36 min	Owner	60-70
16	BT, I6	Brick and Tile	Male	33 min	Owner	70-80
17	BT, I7	Brick and Tile	Male	1 hour 40 min	Owner	60-70
18	BT, I8	Brick and Tile	Male	1 hour 16 min	Executive	60-70

Table 1. Descriptive information about the sample

#### 4.4. Data analysis

The analysis process begins with the collecting of data. I recorded all interviews and transcribed them immediately afterward. I assigned pseudonyms and numbers to each participant and interview. To guarantee the identity of the participants, I also redacted from the transcriptions any confidential information that was disclosed during the interviews. I read each transcription immediately following each interview. I also listened to the respective audiotape during these initial readings. My concern was to recognize the intonations to comprehend the underlying emotions and thoughts, as well as the pauses and unspoken connotations. Important to the analysis of interview data is the transcription of the interview tapes, which includes identifying significant non-verbal and para-linguistic communications and the literal remarks (Hycner, 1985).

During the interview phase, I began evaluating the data in order to review the interviews and field notes to see which issues may require further investigation in future interviews. After completing all interviews and transcriptions, I began the process of systematic coding and attempted to follow the phases of qualitative analysis outlined in the literature (Gioia, Corley and Hamilton, 2012). In the phase of data analysis, I utilized QDAminer software, which let me to save and analyze all the data (interviews, interview and field notes, and participant information) with flexibility and ease, and make initial coding to acquire a basic sense of the responses. In the initial coding, I did not try to force the data to certain terms since this level of analysis require using informant- centric terms and codes. In 1st order analysis, which attempts to follow faithfully to informant terms, minimal effort is made to condense terms, resulting in a propensity for the number of terms to explode at the outset of a study (Gioia, Corley and Hamilton, 2012). I grouped the codes according to their similarities, and the categories formed. After initial coding, I started to make categorizations and I endeavored to avoid putting the data into predetermined categories. Eventually, the relevant categories are reduced to a more manageable number by the process of identifying similarities and contrasts among the numerous categories as the research progresses. In this second-order analysis, the question of whether the developing categories propose concepts that could help us characterize and explain the observed phenomena is posed (Gioia, Corley and Hamilton, 2012). At some point in my research, the analysis revealed that conceptual saturation had been reached, since no new categories were formed from the data. At that moment, I ceased doing interviews. And thus I have created the themes from the emerging categories. Once a workable set of concepts has been assembled, it is investigated if the emergent 2nd order concepts may be further distilled into 2nd order aggregate dimensions. When we have the whole set of first-order terms, second-order concepts, and aggregate dimensions, we have the foundation for constructing a data structure, which may be the most important stage in our entire research approach. The data structure not only allows to configure the data into a sensible visual aid, but it also provides a graphical representation of how it is progressed from raw data to terms and themes in conducting analysis. As a result, the act of constructing a data structure compels researchers to begin thinking about the data theoretically, as opposed to merely methodologically. Based on this, a model has been developed that allows the reader to better comprehend the code category themes and disclose their

interrelationship dynamics. As significant as the data structure may be, it is nonetheless a static representation of a dynamic phenomena, and process research does not explore processes until the static representation can be transformed into a moving one (Gioia, Corley and Hamilton, 2012). In the next chapter on findings, the codes, categories, themes, and unifying model revealed through data analysis are provided in four sections.



### **CHAPTER 5: FINDINGS AND DISCUSSION**

# 5.1. Description of institutional forces, related literature and the dominant processes

Before addressing the important findings, it would be useful to provide a table including a description of how the study's findings were initially categorized as code, category, and theme. In this regard, each table depicts a description of the relevant literature and the dominating processes regarding the relevant quotations.

Themes	Categories under themes	Codes under Categories	Description of Literature
Normative Pressures	Pressures from professional norms	Educational Base	Education is one of the important source of the professionalization in the elaboration and legitimation of the cognitive bases for occupational autonomy (DiMaggio and Powell, 1983)
		Professional and trade associations	Professional and trade associations play an important role in the promulgation of normative rules about organizational and professional behaviors in the institutional field (DiMaggio and Powell, 1983)
		Imposed standards	Normative pressures are associated with the influences of occupational and professional bodies and the effects of professional standards which are being imposed by these occupational and professional bodies on the organizations (Munir and Baird, 2006)
	Pressures from values, norms, customs stemming from industry	Industry association- firm relationships	Normative rules which are mostly internalised through socialization processes includes values, norms, role expectations, duties, rights and responsibilities. Appropriateness, becoming part of a group, or the defined schemas about how to do certain kind of things can emphasis the underlying logic of the normative institutions (Geels, 2004)
		Dominant business processes	Common beliefs radiate an accustomed degree of cognitive legitimacy by creating normative pressure on other firms to adopt similar practices (Özen and Yeloğlu, 2016)
		Professional Networks	One of the source of normative isomorphism stem from formal professional institutions that span organizational units within the field. These institutions influence the field, disseminate norms and direct other members (Tuttle and Dillard, 2007)

Table 2. Description of normative forces and related literature

Themes:	Categories under themes:	Codes under Categories:	Related quotation:
Normative Pressures	Pressures from professional norms	Educational Base	"Due to the low level of education Our master builders have not accepted innovation with the same product for 40 years So they are closed to the innovation" (BT, I2)
		Professional and trade associations	"[We cannot innovate because we cannot influence demand side] In order to influence demand side, we tried to do something with the Chamber of Civil Engineers There's a chamber, there's members, but there's no connection" (RM, 110)
		Imposed standards	"Let's work on a different product Let' s make it accepted by the market There is no such a thing Such a thing does not happen here for us Because you are already producing within certain standards"(RM, I2)
	Pressures from values, norms, customs stemming from industry	Industry association and firm relationships	"We have our own association The association works on these issues [R&D studies The association gives a ready shape We produce according to that shape We only hold meetings on economic issues within the firm]" (BT, II)
		Dominant business processes	"Our habits are not open to innovation Habits as i said Now we have such an order for years" (BT, I7)
			"[The companies in the sector does not deal with the criteria requirements] Because these requirements means a new responsibility for them This time they are avoiding that responsibility For example, when it is said run a lab, have a quality professions They say, i should not deal with them Let me hire an outside consultant and solve this issue with a consultant This affects innovations" (RM, 18)
		Professional Networks	"First you have to trust the system You will invest in the technology brought by that system An expense You have to believe that first of all To make that innovation Nobody wants to do anything without believing that it will work That it will bring a plus to your company To your employees" (RM, I6)
			"A system called ebis system has arrived As if one leg of this system was missing The presses were distributed to laboratories by Aselsan These presses distributed in laboratories are a little bit out of standard They do not have average apparatus Since they do not have avarage apparatus, there may arise different pressures during the crushing [These constraints are keeping us away from innovation]" (RM, I7)

# Table 3. Description of normative forces and dominant processes

Themes:	Categories under themes:	Codes under categories:	Description of Literature:
Coercive Pressures	Pressures exerted by government	Regulations	Coercive pressures arise from government regulations, laws and political influence (Gürlek, 2021; DiMaggio and Powell, 1983)
		Incentives and governmental procedures	The state is a rationalizing and assimilating actor that contributes to the emergence and spread of formal organization to control and standardize social units (Özen, 2011, p. 51). The laws of goverment and the administrative procedures of government- affiliated units create constraints on the behavior of the organizations (Yalçınkaya, 2018)
		Regulatory and local authorities	Social relations and the structures of the local actors are referred as the socially mediated (institutionalized) structures with the aim to achieve legitimacy without necessarily paying regard to the impact on efficency (Rigg and O'Mahony, 2013)
	Pressures exerted by other power groups	Specifications and requirements of customers	Coercive isomorphism arises from asymmetric power relations and is imposed by an external source such as powerful constituents. These powerful constituents may be customers, suppliers, competitors, or politically powerful referent groups and powerful stakeholders (Tuttle and Dillard, 2007)
		Politically powerful institutional actors	Government intervention and political lobbying as the political institutional pressures influence the regulations, enforced standards, rules, and the compliance behaviors of the firms within the sector (Nurunnabi, 2015)

# Table 4. Description of coercive forces and related literature

Themes:	Categories under themes:	Codes under categories:	Related quotation:
Coercive Pressures	Pressures exerted by government	Regulations	"There are many things that can be done in terms of innovation in the use of environmental waste But the state should do something about it Since they are more concerned with the quality of the concrete Since they put pressures on these issues more Environmental urbanism Building inspection authorities are putting more pressure on these issues It is very difficult to do something in terms of procedure" (RM, 15)
		Incentives and governmental procedures	"If you compare the ease of implementation of those projects in Istanbul and those in Izmir, you will see that we are always surrounded with obstacles As long as there are no projects, there is nothing that will lift you up Neither as volumetric nor as innovation" (RM, I10)
		Regulatory and local authorities	" [Referring to firm cooperations directed toward innovative initiatives] We can do it It is not something that can not be done But a little more support is needed Bureaucracy should support it The state should support it Unfortunately we can not see that support Let' s run the raw material field as an association" (BT, 17)
	Pressures exerted by other power groups	Specifications and requirements of customers	"Our innovation comes from big companies Those big companies want special concrete They want some studies from us on this subject There was a dry system in our facilities in the past But now the system has changed Wet system came This happened with the big companies' requests" (RM, 15)
		Politically powerful institutional actors	"Used concrete grades is not technologically possible to develop for more For creating a change in concrete- related productions [For innovative studies in different fields] We attended many conferences about the construction of concrete roads Why can't concrete roads be built? Petroleum There are actors who show petroleum as a trump card in their hands" (RM, 19)

# Table 5. Description of coercive forces and dominant processes

# 5.2. Normative pressures5.2.1. Pressures from professional norms5.2.1.1. Educational base

The collective struggle of participants of an occupation to define the conditions and procedures of their work is referred to as professionalism. Professionalism shows the collective struggle of members of an occupation to manage the output of producers and build both a cognitive foundation and legitimacy for their occupational independence. And education is a significant source of professionalization in the development and legitimization of these cognitive foundations for occupational autonomy (DiMaggio and Powell, 1983). Professional networks or boards, on- thejob socialization and networking, training or professional development, formal education, and certification processes approved by professional bodies are the examples of normative pressures (Caravella, 2011). Normative isomorphism as the process of professionalization is largely related with the recognized and well defined methods by organizations' members. In this regard, formal education and professional networks generate professional norms in response to normative constraints. Educational and professional background are factors of professionalization that establish professional standards (Seyfriend, Ansmann and Pohlenz, 2019).

The interviews reveal that a part of the normative pressures stem from the educational foundation. The educational foundation is viewed as a guiding framework for the assumed scripts, rules, and classifications. The findings indicate, for instance, that the workforce's conduct is supported by the prevalent educational foundation, which is generally formed by the master apprentice and traditional educational style templates. In this aspect, the level of professionalism regarding how a work should be performed is centered on traditional education standards and is deemed enough. According to the difficulties mentioned by the executives, it is recognized that education-based normative constraints can result in employee reluctance to work with differentiated products as opposed to the standard ones. Because various items can necessitate the application of distinct production techniques and procedures. However, the educational foundation that dominates the field of institutions does not promote the adoption of these methods and techniques by employees. This reluctance from employees makes it challenging for customer companies to demand innovative and unique products from producer companies.

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Because customer firms that employ the kind of employees who desire autonomy over their work procedures and traditional educationally based professional values must focus more on the operating costs of their employees resulting from their business practices than on adopting the differences in the products and production techniques. Consequently, this circumstance impacts the strategy direction of producer companies in the institutional field. Due to education-based normative pressures, it is difficult for producer enterprises to introduce new or unique items to the market. In interviews where executives explained the reasons for their noninnovative inclinations, education-based normative influences on desired products in the market were cited as a reason why companies prefer to act similarly to the current market demand structure. As said, proactive market orientation focuses on uncovering and meeting the latent and unarticulated wants of the customer base, whereas responsive market orientation focuses on the existing demands and product domains of the consumer base (Atuahene- Gima, Slater and Olson, 2005). However, the findings of the study indicate that, due to normative pressures stemming from the educational base, firms are unconcerned with latent market demands and prefer to respond to expressed customer needs. Thus, this circumstance is exposed as an impediment to the interviewed organizations' adoption of proactive methods, an essential prerequisite for radical breakthroughs in particular (Li, Lin and Chu, 2008; Pinheiro et al., 2022). Some executives discussing the reasons for their lack of innovative propensity cite the following examples:

> "Our construction masters in the sector does not accept any innovation, and work with the same product for 40 years..." (BT, I2)

"We don't have such initiatives... [Orientations toward changing the expectations of the customers by doing different things from the current requests...] Because the expectation of the customer does not change... It has been the same system for years... So, let me remove that type 13, 5 brick and develop this brick instead... There is no such a thing... There was such an orientation in the past... They brought out a new Turgutlu brick, but it did not hold in the market... People are used to 13, 5 [the type of the brick]... The customer does not accept this brick... The customer takes the brick to their master builders... the master builders say I cannot process that brick..." (BT, 13)

"In this business, rather than contractors, there are master builders who do the construction of the contractors... These master builders are more effective... [On determining product preferences...] Now for example, you go to the master builders and give something... Or they are someone you know... The contractor says buy the type a brick... Master builder says no, I know there is a type b brick, it is much more effective... Master builders guide... All of these need to be changed... [The point of view in mastery... The structure of education in mastery...] I mean what is a master builder? A man graduated from primary school... This has been the case for years..." (BT, I3)

In light of the findings of the study, formal education and training scripts are viewed as crucial components of professionalization in the formation of the cognitive basis about the working conditions, ways of work, and production processes for the workforce. In other words, because the quality of education required for a job is structured as a master-apprentice relationship and because these educational normative values have been accepted in this manner in the institutional field, the employees derive their professional autonomy from this educational foundation. And they can resist against to the challenges linked with the improvements in work techniques. The manner of working with a differentiated product, for instance, may differ from the normative order that the workforce is accustomed to and has learnt through the prevalent educational basis in the institutional field. And this condition can cause employees to demonstrate reluctance to innovative initiatives and the utilization of new products. Consequently, it becomes more challenging for new items to join the market and be approved. Because purchaser businesses place a

premium on worker productivity and labor costs, which are largely influenced by the product preferences of the workforce. Consequently, these buyer organizations place a greater emphasis on worker productivity and labor costs than on the alternative use of new products. Consequently, it is evident from the findings of the study that the structure which sets the requirements of the buyer organizations may also consist of lower-level personnel. That normative pressures emerging from the educational basis structure a form of cognitive legitimation, and that lower-level employees can influence the product preferences of their employers. Moreover, it has been discovered that this circumstance can be a determining factor in the innovation decisions of manufacturing organizations collaborating with these employer-buyer firms. The interviews demonstrate that the professional values of the employees, which are derived from educational norms, remain at the level of master apprentice and old production methods. As a result, it becomes increasingly difficult to shift staff practices into new ways. In this regard, the study provides an in-depth investigation of how educational background might have a detrimental effect on firms' tendency to innovate when it weakens the proactive strategies of producer firms. The following are the executive's thoughts on the matter:

> "We have had situations about this issue... [Mentioning the absence of innovation because they had to concerned with the current customer needs...] The contractor said that... I liked the product very much but the master builders using this product are more important... Cause the work of master builders with the product both reduces the cost and increases the insulation... I took the product, but the master builder said that I can build a wall of 50 square meters a day with this old product... But if you give this to me I cannot build 10 square meters with it... At such a simple point here, this work is interrupted... [Expressing that they are mostly concerned with replying the expressed customer needs rather than the latent market needs...]" (BT, I2)
"We cannot change the result... This is something completely related with the perceptions of the customer... Before the customer needs something new... To put that innovation on the customer... The customer in front of you should not be a traditionalist but a questioning visionary man... The structure in front of us has a very low education level... They continue what they saw from the traditionalist view... It is very difficult to describe product renewal..." (BT, I2)

"Due to the low level of education... Our master builders have not accepted innovation with the same product for 40 years... So they are closed to the innovation... But when you tell them, for example, this product is mandatory in the project from the municipal construction works... If it is said that we will use it obligatory, only then to innovation... [Emphasizing the difficulty of acting proactively in changing the direction of current demand...]" (BT, I2)

According to the findings of the study, lower-level employees whose occupational autonomy is determined by educationally-based normative norms can significantly influence their employers' judgments about product preferences and production methods. As a matter of fact, the normative influences stemming from the educational base do not impose a certain education and training criterion on professions such as contractorship; low-level personnel might be a decisive factor for the most widely accepted and preferred products on the market. In addition, due to the consequences of recognized and widespread educational-based normative constraints in the institutional field, there are difficulties in developing a qualified mid-level workforce, which occupies an essential position between the higher and lower levels of workforce. Consequently, lower-level employees can greatly influence the preferences of producers regarding products and work techniques. Consequently, it becomes challenging for manufacturing companies to adopt proactive strategies in order to develop new goods and processes to shift consumer preferences. Because normative values derived from the educational background might impede the innovative tendencies of businesses when they weaken their proactive initiatives. In light of the study's findings, it is clear that normative values originating from the educational foundation, which dominate the institutional field, influence all other actors and have an effect on the market structure in terms of product preferences and work methods related to the product specifications. Executives, while discussing the reasons for their non-innovative tendencies, cited these restrictive educationally-based normative effects as the rationale for the widespread perception that novel products will not be accepted by the market. In this regard, enterprises are unable to establish proactive strategies, which are an essential innovation precursor, because normative effects do not provide a solid foundation for the development of such strategies. Some opinions on how these normative impacts can influence the innovation propensity of firms are as follows:

> "We try to put a lot of effort for innovation... But this occurs with the acceptance of the customer... This innovation is all about customer acceptance... When you develop an alternative, you do a favor... But you don't actually innovate unless the customer accepts it..." (BT, 12)

> "We are trying to develop and offer new products, but the accepted product in our market is still the same... 40year-old brick... The customer does not want to change the product... This is partly due to... For example, what we call contractor is a very special adjective in Europe and America... There are schools for this, but there is no such a thing in Turkey... Because the contractors do not have much knowledge on this subject, they look at the master builders' guidance... Also the master builders are traditionalists... Because of the educational base of the master builders'... With the same product for years... They do not accept innovation..." (BT, I2)

"We have many civil engineers, but we do not have a department called for master builders... Master builders are very important... But it is still a traditional job... There is a problem of qualified personnel... There are a lot of workers... Lots of engineers... But there are no electrical technicians as an example... We are dealing with the master builders as an interlocutor in our sector... Therefore, we are not successful in product renewals..." (BT, I2)

Innovation is determined by firms' market-response strategies (Li, Lin and Chu, 2008; Özsomer, Calantone and Di Bonetto, 1997; Özsomer, Calantone and Di Bonetto, 1997). In comparison to the effect of adopting proactive marketing orientations and strategies, adopting strategies and marketing orientations aligned with current market demand have a weaker impact on the creation of radical innovations. There is a favorable and substantial association between proactive marketing orientations - strategies and radical innovations (Li, Lin and Chu, 2008). While organizational structures and the organizational environment alone have a limited effect on innovation outputs, the effect of organizational structure and the environment increases when proactive marketing orientations and strategies are implemented. According to Özsomer, Calantone and Di Bonetto (1997), the most influential element on innovation is the strategic orientations of the firms, followed by organizational structures and environment. In this context, aggressive, competitive, and risk-taking strategies are cited as the primary drivers that inspire businesses to become more innovative. Due to the fact that the chosen strategy can only be implemented if the corresponding structural mechanisms are in place, strategic orientation will also impact organizational structures. Even while the organizational structures of firms with more proactive and aggressive strategic orientations are more flexible, merely the organizational structure and environment do not have as much of a major and potent impact on innovation as the strategic orientations of organizations. However, if a proactive strategy is adopted, this effect becomes more potent and significant (Özsomer, Calantone and Di Bonetto, 1997).

In the literature, the topic of assessing the institutional environment in terms of its impact on the strategic orientations of corporations is predominantly examined from the viewpoint of government policies such as trade laws, taxation, and financial concerns (Dai and Si, 2018). Government policies as part of the institutional environment have a direct impact on the strategic direction and entrepreneurial activity of businesses. However, the effect of government policy is commonly attributed to environmental determinism, which assigns organizational behavior and chance to environmental natural selection (Dai and Si, 2018). Not only the macro, but also the regional institutional environment in which strategic decisions are made, is highlighted as being crucial and vital in the analysis of company behavior. In contrast, environmental determinism holds that the institutional environment, such as government laws, can directly influence the behavior and performance of organizations (Dai and Si, 2018). In order to examine the influence of government policies on strategic decisions and entrepreneurial activity, it is essential to consider local institutional variables and their effects on managers' perceptions. In this context, Dai and Si (2018) changed their focus to how regional institutional characteristics can influence the opinions of strategic decision-makers towards government policies. Thus, it is essential to evaluate the consequences of government laws not from an environmental determinism perspective, but from one that takes into account the impact of regional institutional factors on the strategic decisions of managers (Dai and Si, 2018). In other words, the necessity of researching the impact of regional institutional development and informal institutions on entrepreneurs' perceptions of the success of central government initiatives is highlighted (Dai and Si, 2018). Similar to Dai and Si (2018), Doblinger, Dowling and Helm (2016) note that the institutional influences on the relationship between strategy and innovation are mostly investigated at the country or industry level. In addition, the micro-level elements that influence the proactive strategy selection, risk-taking, and innovativeness of organizations, such as the personality structures of managers or company owners and the ownership status of the firms, are frequently explored. In this sense, the antecedents of the innovation-strategy relationship are studied either within the context of micro-level determinants or within the context of the institutional environment, but at the industry and country levels. Due to the fact that institutional roles in the relationship between strategy and innovation are primarily analyzed at the macro level in terms of highly aggregated indicators at the industry and country levels, it becomes impossible to analyze how individual firms perceive these effects and react to these regulations in their regional embeddedness. Regional

embeddedness comprises local institutional features whose influence on influencing individual enterprises' perceptions and responses to industry/country-level regulations urge further study. Therefore, it may be insufficient to analyze the consequences of the institutional environment's role in the relationship between strategy and innovation by focusing solely on government issues from a macro perspective and ignoring the effects of local institutional elements. Doblinger, Dowling and Helm (2016), when examining the effects of public policies and regulatory uncertainty on firm level entrepreneurial decision making processes and ability to innovate, noted that maintaining close network ties with research associations within the local context are the most important factors for firms' innovativeness and entrepreneurship.

As stated previously, governmental policies such as trade regulations, taxation, and financial policies may influence entrepreneurial decisions and proactive firm behaviors regarding whether or not to invest in innovation projects by stimulating technology demand, feed-in tariffs, or quota obligations (Doblinger, Dowling and Helm, 2016; Dai and Si, 2018). These policy-induced institutional impacts serve as stimulating mechanisms based on the fluctuating demand and structure of the market (Doblinger, Dowling and Helm, 2016). In addition to these policy- generated institutional effects, social pressure- produced institutional effects may operate as a tool to encourage enterprises to adopt proactive measures (Berrone et al., 2013; Moyano- Fuentes, Maqueira- Marin and Bruque- Camara, 2018; Garrone, Grilli and Mrkajic, 2018). On the other hand, environmental innovation and energy efficiency innovation studies frequently address the institutional effects that act as stimulating mechanisms in changing the market structure and market demand and thus act as a determining factor in the relationship between strategy and innovation (Berrone et al., 2013; Moyano- Fuentes, Maqueira- Marin and Bruque- Camara, 2018; Garrone, Grilli and Mrkajic, 2018). In addition, the literature reveals that the relationship between strategy and innovation is investigated through institutional factors. These institutional variables appear to be non-governmental organizations that are not part of official channels but play a significant role in establishing environmental standards, norms, and pressures on behalf of the many external stakeholder groups.

In this regard, the research investigates the institutional effects in terms of their roles in altering the market base and market demand via policy-induced (Dai and Si, 2018; Doblinger, Dowling and Helm, 2016) or social pressure-induced mechanisms

(Berrone et al., 2013; Moyano- Fuentes and others, 2018; Garrone, Grilli and Mrkajic, 2018). While a policy-induced institutional environment may allow firms to capitalize on these policies and engage in more entrepreneurial activities (Dai and Si, 2018), social pressure-induced institutional elements may influence strategyinnovation relationships by altering market base and market structure (Berrone et al., 2013). In this regard, the question of the role of institutional effects on the relationship between strategy and innovation becomes significant, as the majority of studies in the literature concentrate on the positive effects of specific institutional factors such as government policies or social pressures. In order to uncover institutional responsibilities on the relationship between strategy and innovation, it is crucial to ask what additional institutional elements may be beneficial not only in terms of enabling but also of impeding the change in the market base and market structure. In fact, executives outlining the reasons for their non-innovative inclinations disclosed their established techniques for meeting current market demands while emphasizing the immutable and unchangeable characteristics of the market and demand structure. In these interviews, they discussed the impeding effects of educationally-based normative pressures on these immutable and unalterable characteristics of the market and demand structure and, consequently, the strategic orientations of the enterprises. Due to the paucity of studies describing the restrictive role of normative pressures on strategic orientations and innovation relationship, the study findings provided an in-depth analysis of how education-based normative pressures can have a negative impact on firms' propensity to innovate when they weaken proactive strategies. Consequently, this gap is filled by the following finding:

# Key Finding 1: The educational base has a negative impact on the tendency of firms to innovate when they inhibit proactive strategies.

As stated previously, education-based normative pressures might function as an impediment for producer firms to adopt proactive strategies and to change market base - market demand with innovative products and processes, as opposed to focusing solely on the current market needs. Consequently, based on the findings of the study, it can be concluded that educationally-based normative pressures can have a detrimental effect on enterprises' innovation inclinations when they impair the firms' proactive strategies. In addition, the study's findings provided a comprehensive analysis of how educational-based normative pressures can impede the establishment of collective interest-based work flow amongst the actors in the institutional field. In other words, the quality and quantity of actor ties in the institutional field can be influenced by normative effects stemming from the educational foundation. Although the quality and quantity of actor ties in the institutional field are important precursors for the innovation outputs of firms, the interviews reveal that there are educational incompatibilities between actors in the institutional field when it comes to sharing information and being part of a common output providers. The lack of a facilitating environment for the emergence of these collaborative innovation networks between each other's as actors (producer firms, customer firms, the employees of these firms, and the other related actors) in the institutional field was revealed by executives explaining their lack of innovative tendencies. The educational foundation of normative pressure is the legitimation and diffusion of the education required for the professions in the institutional field. In this regard, it plays a significant role in constructing educational compatibility between actors in terms of their professional qualifications. Nonetheless, the findings of the study indicate that these normative effects can play a preventative role rather than a facilitative one in the establishment of innovation networks. Due to the fact that actors in the institutional field do not choose to be a part of shared processes where all actors cannot assist the continual improvement of innovative initiatives due to educational incompatibilities. The executives interviewed claimed that any new initiative they initiated in their own production processes cannot be continued in the same manner by other actors in following production processes until the final stage. Executives, while justifying their non-innovative inclinations, cited mismatches in the professional skills of the actors in the institutional field as the reason why they prefer to avoid innovative initiatives involving product processes over which they have little influence. Due to the structuring effects of normative effects on the educational compatibilities of the actors in terms of their professional qualifications, it is impossible to form networks of collaborative innovations between the actors. The executive opinions on the subject reflect the following concerning this issue:

> "Our attempts cannot reflect on innovation... It did not happen... This is one of the biggest problems in the

sector... While we are trying to renew ourselves... Customer contractors cannot keep up with me... Because they are not in that education... We are dealing with R&D... We are thinking about how we can achieve the same strength with less cement... If I put ash, the effect of ash on concrete... We always work on these issues in the laboratory... We always try to do our job perfectly, but it cannot reflect on innovation... [Due to the subsequent processes related with the other actors... When the contractors cannot keep up with me, these initiatives are left unfinished...]" (RM, 19)

"... This situation pushes us back in innovation decisions... Discourages us... Because I spend money on R&D... I try to do something with the laboratories and quality technicians I have hired for R&D... A very good product with a great consistency... Innovative... [You have reached a very good result in your innovative initiatives at your production phases...] But then you leave these innovative attempts to the phases that does not belong to me... Until it froze... Under what conditions it was protected... Until it unplugged... Until what conditions it was watered... Whether these are done or not... It is not in your hands... I cannot influence this... After that, ready mixed concrete maker becomes guilty..." (RM, I9)

As stated previously, firms emphasize the significance of normative pressures' educational base in terms of their function in maintaining the continuity of innovative initiatives in production processes. In other words, they underlined the significance of the structuring processes of normative pressures for the compatibility of qualifications and educations between actors in the institutional field. In an institutional environment where such compatibilities between actors are not captured, firms believe their innovative activities cannot be sustained by other actors in the other production stages, particularly for semi-finished products. Consequently, they tend to avoid these innovative initiatives. Although innovation networks are a significant driver of innovation, the inhibitory influence of educationally-based normative pressures on the formation of innovation networks among actors is demonstrated. In this regard, the study provides an in-depth analysis of how educationally based normative pressures might have a detrimental effect on firms' willingness to innovate when they damage firms' innovation networks. The following are the executive's thoughts on the matter:

> "The part of the Environmental Urbanism Building Department about constructions... It organizes conferences... But we always say... Along with us, train the people who complete the semi- finished product to the finished product... Train the people who do the work after the 50 percent part of the production processes... Because the work and money I did in R&D... [It is incomplete and innovation initiatives do not progress in the same way in all these processes...]" (RM, I9)

> "... [Innovation does not come, it does not progress... Because my work my time and money is wasted by the wrong practices of other employees working in the following processes...] For example, we once distributed brochures describing the rules that must be followed after the ready mixed concrete is placed... That is, so that my high quality semi- finished product maintains the same quality until it turns into a full product in all processes... I have contractors... I say to the owners of those companies... I will train and educate your field team... As a concrete company, we did these things... result... No result... Nothing... Such a structure does not exist in Europe... The very beginning of this job is education... [There are problems at the level of professionalization related with educational base...

preventing the continuation of innovation initiatives initiated by an actor in the production process by all actors...]" (BT, I9)

Firms fear taking risks because educationally based normative pressures affect every step of the production process for semi-finished items. And they are hesitant to participate in joint projects aimed at producing shared outcomes with other institutional actors. Especially in situations where the entire production process does not belong to a single company, they do not want to be liable for any issues that may develop due to the shortcomings of the other actors. Consequently, they avoid new initiatives pertaining to their own processes during the phases of manufacturing semi-finished items. As a recurring theme in the interviews, executives pointed out that, although they make novel enhancements to their own production parts for semifinished products, they believe that these new initiatives will not be promoted in the same manner by other actors in subsequent phases. Because there are no compatibilities in terms of qualifications and education amongst the actors, different actors will continue and advance these new initiatives created by any company during the production process. Consequently, organizations exhibit non-innovative tendencies due to the absence of procedures that will ensure the continuance of inventive innovations already implemented. This unconnected structure among actors creates a system in which organizations do not share information, build network flows, and develop mutual trust and synergy, which are the most important drivers for innovation networks and, by extension, innovation. The following executive opinions summarize the consequences of these educationally based normative pressures on innovation networks and the firms' innovation tendencies:

> "Other factors that affect the result in innovation are also important... If the client you are dealing with is not looking at any of them... Innovate as much as you want in the product... There is nothing as difficult as being semi-finished product manufacturer... We are not a full product manufacturer... For example, I have made my concrete very well in R&D... Its consistency is very good and its drift is very good... I have a very nice concrete

with air gaps... But when it is poured on the field, bad results can occur due to reasons beyond your control... [Emphasizing that innovations cannot be achieved due to the structure of the relationships with the other actors...]" (RM, I9)

"I cannot intervene in the conclusion part of the final product... Because I am not responsible for placing that concrete into a ready-made mold... I am only responsible for pouring that concrete into that mold... If you do not place it well... And if your pattern is not good, if you leave spaces in between... [This is why I do not choose to take risks and search for different innovative processes] God forbid... When there is a problem with the strength of the concrete... In the slightest mistake... Risk... Irreversible..." (RM, I9)

The knowledge base obtained from external knowledge sources, including as consumers, suppliers, consultants, universities, and competitors, plays a vital part in the innovation process. In other words, external knowledge received through such external knowledge sources has a significant impact on the innovation successes of businesses (Gomez, Salazar and Vargas, 2016). The key resources for innovation results are a company's knowledge management capabilities in retaining and deploying knowledge. Innovation is significantly and positively impacted by a company's outsourced knowledge management practices (Hock and Clauss, 2017). In this regard, networks, which are viewed as an appropriate instrument for accessing and spreading information, are referred to as key concepts for the innovation outputs of organizations, as they enable them to access and utilize information outside their boundaries via strategic alliances (Ahuja, 2000; Chauvet et al., 2011). The efficiency of external knowledge research, a significant determinant in uncovering the incremental innovation capacities of firms, is contingent on the network embedding of the focus firm in innovation networks. Network embeddedness is a term indicating that an organization's performance is heavily reliant on its structural interactions with other organizations that are embedded in the network. Thus, an innovation network is founded on the fundamental concepts of network embeddedness. Network embeddedness describes the structure of relationships with other actors in the network (Yan, Zhang and Guan, 2020). Studies studying the relationship between innovation and network embeddedness indicate that the effective usage of network embeddedness contributes to innovative outcomes (Lin et al., 2009; Lyu et al., 2020; Yan, Zhang and Guan, 2020). It is believed that relational and structural network embeddedness has positive effects, particularly on exploitative innovation (Yan, Zhang and Guan, 2020). The structural dimension reveals the pattern and structure of the connections between network members, whereas the relational dimension reveals the breadth and depth of interpersonal relationships that network members create with one another. In addition, the relational dimension of network embeddedness denotes the formation of frequent and intense relationships between actors. Depending on the nature of the relational dimension in network embeddedness, knowledge and mutual trust are generated through frequent and intense relationships between actors. And this circumstance has a significant role in capturing novel combinations of information and skills, and consequently in the birth of innovation (Yan, Zhang and Guan, 2020).

Observed research studying the relationship between the inter-firm network strategy and innovation reveal that the inter-firm network method is handled through the principles of knowledge sharing, knowledge transfer, and knowledge search (Gao et al., 2014; Zhang and Baoliang, 2017). In this respect, inter-organizational knowledge is defined as the knowledge that firms receive through their contextually and socially embedded external marketplaces (Gao et al., 2014). Gao et al. (2014) investigated the moderating effects of institutional contexts on the association between enterprises' transferred knowledge and innovations. And they discovered that institutional environment positively moderates the links between transferred knowledge and innovation. The relationship between inter-organizational transferred knowledge and product innovation is found to be positively moderated by an institutional environment in which economically, politically developed, and relatively modernized social institutions provide better knowledge, human resources, and market intermediary facilities (Gao et al., 2014). Zhang and Baoliang (2017) examined the effects of institutional isomorphism on the knowledge search of cluster companies, often known as knowledge networks. In a network system where the institutional isomorphism - mimetic and normative isomorphism - enables firms to

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imitate and learn from other network members through institutional norms, professional leading powers, and successful models and examples, failure risk is reduced and innovation performance is enhanced (Zhang and Baoliang, 2017). In contrast, Chauvet et al. (2011) brought attention to the universal method in network researches, in which a specific network structure is routinely correlated with identical outcomes. In addition, they switched their focus to the notion that distinct situational factors, such as environment, cultural context, and collective behavior standards, might result in diverse network linkages. Although investigating the effect of institutional theory on network structures is an important topic (Chauvet et al., 2011), the role of institutional theory in innovation networks and innovation is frequently investigated through the concepts of information sharing between firms and transferred information in terms of existing interfirm network structures (Gao et al., 2014; Zhang and Baoliang, 2017). Consequently, rather than focusing solely on the institutional effects in the existing inter-firm networks and innovation relationships, it will be an important contribution to the literature to reveal preventive institutional factors on the emergence of innovation networks as an innovation determinant. In fact, the study's findings indicate that education-based normative pressures may impede the growth of innovation networks between actors that are focused on information exchange and cooperation in the creation of innovation. Through the relational feature of network embeddedness, reciprocal knowledge permits actors to build long-term relationships inside innovation networks. The mutual understanding knowledge and technology reduces operational uncertainties in the information flow and improves the parties' mutual understanding, hence increasing their innovative capacities through the use of external information and technologies (Han et al., 2020). While knowledge-based mutual understanding is essential for the emergence of innovation networks between actors (Han et al., 2020), study findings revealed that the knowledge flow and actor ties, and thus innovation networks, cannot be achieved due to the restrictive effects of educational-based normative pressures. And despite the fact that innovation networks are a significant determinant of organizations' innovation tendencies, there is a paucity of research demonstrating the constraining effect of normative demands on innovation networks and innovation relationships. In this regard, the descriptive explanation of the determining role of educationally-based normative pressures on innovation networks and innovation

relationships appears as a crucial topic. Consequently, this gap is filled by the following finding:

## Key Finding 2: Educational base has a negative impact on a company's ability to innovate when it suppresses innovation networks among professions.

### 5.2.1.2. Professional and trade associations

Professional and trade associations are one of the means by which firms in the institutional field define their working methods and standards. These organizations play a crucial role in the dissemination of normative principles about organizational and professional conduct in the institutional field (DiMaggio and Powell, 1983). Due to the normative order promulgated by professional and trade associations, the actors such as producers, customers, and associations cannot effectively share information and ideas for innovation-oriented gains that can replace conventional production methods and products, according to the findings of this study. In another word, due to the normative order in the institutional field, it becomes impossible for the producers and customers to be a part of a cooperative action in the acceptance of various production methods or product types rather than habitual working methods and products. Professional and trade associations have a normative effect on the formation of product kinds and quality standards. Consequently, this circumstance affects market buyer preferences. In this way, the norms that emerge as a result of the functioning structures of these associations serve as a compass for the market preferences of customers. When executives were asked about their innovative tendencies, they emphasized that they were unable to conduct many innovative studies due to the lack of a mechanism for exchanging ideas with clients prior to preproduction. In particular, they highlight the impeding influence of professional and trade associations in the formation of this impeding structure for firm-customer partnerships. Executives addressing the reasons for their non-innovative tendencies disclosed that they do not collaborate with customers throughout the pre-production stages of offering innovative new processes and goods to determine client preferences. These interviewed businesses stressed the disconnections in this regard. This divergence is attributed to the norm-setting function of professional and trade associations in the institutional field. As the vehicle for defining and disseminating normative rules regarding the shape of items, professional and trade groups play a crucial role in organizing the demand side of the market. Executives discussed the difficulty of communicating their new ideas within these procedures, which are used by processional and trade associations to change the institutional field. And under this situation, businesses cannot collaborate with their customers. In this regard, the study provides an in-depth analysis of how professional and trade associations might have a detrimental effect on firms' inclination to innovate when they decrease firms' customer collaboration. The following are the executive's thoughts on the matter:

"We cannot catch up with innovation because we do not determine the accepted products by our own... We meet with the customer only when the project will be implemented... Only after that... Decisions are made... Everything has been determined about the products and process to be applied... Only after these processes we meet with the customer..." (RM, 110)

"If we were able to inform and direct the associations which made these decisions before... If we could inform those associations and tell what we can do according to what the customers want... Then we can make innovative initiatives more comfortably... We tried this but it did not work... There is a deficiency about these issues..." (RM, II

"... [We cannot innovate because we cannot influence demand side...] In order to influence demand side, we tried to do something with the Chamber of Civil Engineers... There's a chamber, there's members, but there's no connection... No interaction... So they can't redirect... They just set up a system to get dues... So, when it is like that, it turns to the personal efforts again... So this idea of being able to act together disintegrated and we could not recover this formation again..." (RM, 110)

Executives assert that the demand structure is the most important component that will spur innovation. However, they also assert that engagement with customers is impossible at the stage of developing a demand structure that will foster innovation. Executives cited the norm-setting influences of professional and trade associations in the institutional field as one of the reasons why firm-customer collaborations could not be accomplished efficiently. Professional and trade associations take a normative stance on workforce management and product shape. According to executives, enterprises are not properly participating in these processes in which professional and trade organisations play a significant role. Consequently, executives state that they cannot interact with clients until the market's norms have been decided and established by the normative forces of professional and trade organisations. In light of the study's findings, it is clear that the current order prevailing in the working procedures of professional and trade associations does not permit all institutional actors to effectively communicate information and ideas prior to rule-setting processes. While the demand structure is produced and determined by the dissemination of normative rules by associations, the producer and consumer base's responses to the established demand structure are on a separate side. Therefore, it becomes more difficult for manufacturers, buyers, and associations to adopt cooperative measures regarding market-accepted, preferred, and disseminated products and processes. In the interviews, executives stated that enterprises and customers cannot work together to develop innovations. In this regard, executives stressed the significance of the normative effects of professional and trade associations in facilitating a structure that will pave the way for customer-firm cooperation. Due to the absence of this type of supporting structure, businesses just adapt to established market preferences instead of focusing on innovative initiatives with consumer collaboration. Some executive perspectives on these normative forces that influence the innovation tendencies of businesses are as follows:

> "Innovation can be made, but it is about demands... You cannot drag it alone... We had the general manager... He said here we will determine the market demand... Here we will go to the engineers associations... Then we will say use self-settling concrete... We will drag the

market... But nothing like this happened... Because in our industry, processes don't work like that..." (RM, I10)

"There are permeable concrete... It is produced when customer wants... For example, we tried to do something with the Chamber of Civil Engineers in order to influence this demand... There is a chamber of civil engineers... There are members... But there is no connection... There is no interaction... I mean, chambers cannot direct these issues completely... Cannot determine... They have established a system only to receive dues... So when it is, the work turns back to individual again..." (RM, 110)

"Air concrete production... It would open a different path for us... But it has not become widespread... If concrete roads were widespread, it would cause a lot of change in the industry... Finishers would be used... There would be a demand for those machines... And concrete would be designed accordingly... But it did not work... As a sole company you can't do this change... A superior identity should do... This may be a Readymixed Concrete Association... Neither decision makers nor producers gathered... So this initiative was not successful..." (RM, 110)

According to empirical studies, cooperation with customers has a substantial impact on the innovative behavior of businesses (Kuhl and Costa, 2019; Kristensson, Gustafsson and Witell, 2011). Collaborations with competitors, suppliers, universities, and customers are crucial innovation determinants in terms of their effects on the innovation output of businesses. Temel, Mention and Torkkeli (2013) highlighted the significance of the favorable effects of customer collaborations on the innovation propensities of Turkish companies. In their empirical study, Temel, Mention and Torkkeli (2013) highlighted the considerable favorable effect of solely

interacting with customers, as opposed to other partnerships (collaborations with competitors, suppliers, and universities), on the innovation propensities of enterprises. Being in close contact with clients and cooperating with them has been identified as a crucial element for firms to develop innovative solutions. Being in close contact with their clients and forming customer partnerships are identified as crucial elements for firms to develop creative ideas and products (Kristensson, Gustafsson and Witell, 2011). However, there is a paucity of study on how the issue of customer partnerships is addressed within the settings and what type of engagement is conducted. Kristensson, Gustafsson and Witell (2011) stressed the significance of exploring the relationship between customer cooperation and innovation in contextual studies. Kristensson, Gustafsson and Witell (2011) stressed the need of understanding the subject in a contextualized subjectivity in order to comprehend the collaborations between the company and its clients. Studies examining collaborations from a contextual perspective with an institutional theory approach concentrate mostly on supply chain cooperation (Hofman, Blome and Schleper, 2020). In this light, the significance of analyzing cooperation not just between supply chain actors, but also between companies and customers from the standpoint of institutional theory becomes apparent. Consequently, our data points to the following finding:

### Key Finding 3: The innovation propensity of firms is negatively influenced when professional and trade associations weaken customer cooperation.

### 5.2.1.3. Imposed standards

Normative pressures are related to the influences of occupational and professional bodies, as well as the consequences of professional standards placed on organizations by these occupational and professional bodies. Organizations are expected to adhere to professional standards and adopt the processes deemed legitimate by these professional organisations. Normative pressures characterize the manner in which organizations are expected to adhere to professional norms and embrace the systems that are deemed legitimate by professional groups (Munir and Baird, 2016). Formal professional institutions that cross organizational units within the field are a source of normative isomorphism due to the manner in which they

communicate norms, influence the field, and guide institutional field members (DiMaggio and Powell, 1983; Tuttle and Dillard, 2007).

The normative pressures are determined by the relevant professional groups' norms as an external mechanism. The study's findings indicate that the effects of the standards established by the relevant professional groups manifest as normative pressure. Companies are expected to adhere to the standards established by these professional groups. The study provides an in-depth investigation of how imposed standards can prevent businesses from innovating production and other organizational activities. Due to the fact that they are required to adhere to precisely defined, stringent criteria, most businesses believe it is sufficient to produce in accordance with those standards. Since every requirement is in some way decided by the imposed standards, this circumstance might lead to a rationale in which companies believe they do not need to make any more efforts to develop unique product characteristics or production techniques. This circumstance is believed to be one of the reasons why the interviewed companies exhibit non-innovative tendencies. Due to the fact that the required production standards from companies are precisely and stringently established, businesses believe that new methodologies and innovation-based research cannot be conducted within the required constraints. Due to the determining effect of standards, businesses may acquire the rationale that it is impossible to conduct knowledge searches that gather diverse information within the confines of precisely and stringently set criteria. Knowledge management processes are significant determinants of organizations' innovation outputs. Nonetheless, the rationality of businesses impedes the establishment and efficient operation of knowledge management processes. According to the study's findings, imposed standards can damage organizations' knowledge management procedures, which can affect their inclination to innovate. Some executives, when describing the causes for their lack of inventive tendencies, disclosed these impeding aspects of imposed standards on knowledge management systems. The opinions of the executives on the matter are as follows:

> "... We don't make differentiated products... We generally produce concrete in accordance with the standards... Whatever is asked of us, we give it... Standards are clear... The standards allowed here are

clear... Production is done according to them..." (RM, 12)

"Let's work on a different product... Let's make it accepted by the market... There is no such a thing... Such a thing does not happen here for us... Because we have a certain thing... You are already producing within certain standards..." (RM, 12)

"A certain standard is determined... So you are working accordingly... c16, c20, c30... They gave you these... They have given the environmental impact limits... They already wants from you to produce it... You can't do anything other than that..." (RM, I2)

"There is no need for innovation... It is all about aggregate and cement... [Production processes and techniques...] Everything about production is very clear... You put aggregate in it, the proportions are clear... The proportion of cement is clear... It is such a simple thing actually, when you look at it, I don't think the concrete production process is very difficult... [So simple... No need for obtaining new knowledge related with the different additives usage...]" (RM, I2)

"... We just take the cement and make a fitting with the aggregate... We turn it into concrete with a recipe... [According to the determined standards...] No R&D... There is no R&D here..." (RM, I2)

The obligation to produce in accordance with particular standards restricts firms from conducting knowledge research on alternative ways and possibilities for product characteristics and production processes. Therefore, this situation acts as an impediment to organizations' motivation to acquire and process new knowledge. The consequences of imposed standards can operate as an impediment to companies' desires to pursue alternative production methods through the acquisition of new information. Innovation can be sparked by the creation and acquisition of fresh information pertaining to the technical characteristics of manufactured products. Nonetheless, because of the restrictive influences of imposed norms, this circumstance cannot be established. In this regard, the study provides an in-depth analysis of how enforced norms might have a detrimental effect on organizations' ability to innovate when they impair firms' knowledge management procedures. The following are the executive's thoughts on the matter:

"We can't do things differently... Concrete has a standard... It has a standard that we all have to abide by... All companies have to comply with these standards... Therefore, when you look at it, you have to give the same products..." (RM, II)

"... There are standards that we all adhere to... Relevant standards have been made... These two standards already tell you how to make concrete, in which dosages you should work in the minimum dosage... There is a constraint and restriction there... While you can provide the strengths you want with lower dosages... You can't do that... [We can't explore different ways... Related with the usage of different additives... The usage of production materials...]" (RM, I7)

"... For example, we tried micronized limestone... What did we aim for in the micronized limestone trials...? The usage of less cement.. Our goal in this trials was lowering cement doses with achieving higher strength... But here is one of the biggest constraints is the relevant standards... Relevant standards says you cannot go below that dose... While you can provide more strengths with lower doses... The relevant standard is blocking you... This creates an obstacle..." (RM, I7)

"... It affects innovation... The relevant standard... Restricts you... It restricts on a cement basis... On dosages basis... While you can produce stronger concrete with different cement types..." (RM, I7)

"... Both in terms of providing quality and in terms of reducing costs... [Exploring different paths is hindered...] We're not evaluating a higher type of materials... We don't rate it... We're leaving out the assessment... Conventional standard cement products... You have to work with the types of materials used in the market... For example, cement factories don't want to deal too much with different cement structures and different types of cement... [This situation affects the alternative products offered to us by the suppliers...]" (RM, I7)

In light of the data acquired from the interviews, it is clear that the professional authorities create and enforce the standards in a precise and stringent manner. In addition, this circumstance discourages businesses from exploring for diverse knowledge bases regarding product characteristics and production procedures. Executives acknowledged the importance of evaluating items based on the technical specifications of the finished products rather than strictly defined pre-production requirements to determine whether enterprises achieve certain standards. The executives noted that controls over whether or not the requirements are met must be implemented via product characteristics. This flexibility in setting the criteria that firms must comply with, according to executives opinions, will enable them to innovate their products and processes. However, according to the study's findings, the imposed standards are neither varied nor adaptable based on the features of the pre-production phases, regardless of the production procedures. The rigidity of the

standards and regulatory procedures hinders the firms' knowledge search and knowledge generation activities. Knowledge management practices are essential predictors of innovation, yet the study reveals that executives indicate the detrimental effects of standards on the performance of organizations' knowledge management processes. Executives describing the causes for their non-innovative inclinations stated how imposed norms might have a detrimental effect on organizations' propensity to innovate when they impair firms' knowledge management procedures. The following is one of the executive's opinions on the subject:

"When standards are set... Like minimum at this value, maximum at this value... At this thickness and weight... Materials with certain rules are produced in the construction... Now when it is not done in this way... When it is said that you will be inspected according to the technical specifications you have written... When it is said... You are free... Write down all the technical specifications of this brick... [And inspection will be made accordingly...] Construction materials becomes more open to innovation..." (BT, 18)

In the parts explaining why different and new products cannot be manufactured in the sector, executives emphasize the significance of the professional authorities' participation and their influence on the field's established standards. In the establishment of standards, ignorance of local dynamics results in the importation of foreign standards into the region. The executives show that this methodology causes a deficit in the firms' measurement, evaluation, and knowledge-gathering procedures, as the enterprises rely on the findings of internationally recognised standard principles. They emphasized the necessity and significance of measuring, evaluating, and accumulating knowledge in accordance with regional dynamics. They indicated that organizations can manage their knowledge management procedures more efficiently in this manner. In this regard, a number of executives elaborating on the causes for their non-innovative inclinations disclosed these impeding factors of enforced norms on information management operations. The perspectives of the executives on the matter are as follows: "... Standards are anyway... There is currently a standard translated from Europe called "tse825" as it is from Germany... You build all your assumptions on it... On these standards... For example, those standards say, a brick of this weight has these features... You say, I produce bricks of that weight... However, when measurement and evaluations are made, it turns out that you have values much above this or you have values far below this... According to the assumption on these standards, when all calculations are made, it is thought that something average is determined, but those German norms are not according to the value here... So it is though that something average is detected, but it is according to the German norms... Not according to the norms here... This affects innovation..." (BT, I8)

Knowledge management practices (Andreeva and Kianto, 2012), which aim to improve the effectiveness and efficiency of an organization's knowledge resources, are known to have a favorable impact on innovation (Alegre, Sengupta and Lapiedra, 2011; Inkinen, Kianto and Vanhala, 2014; Lin, Che and Ting, 2012). Knowledge being a collection of experiences, values, contextual data, and expert opinions serves as a foundation for the generation of new knowledge, and is frequently incorporated inside organizational routines, practices, and conventions. Thus, the information entrenched in organizational routines, practices, and norms exists not only in documented and stored forms within the organization, but also in unrecorded and unstored forms (Davenport and Prusak, 1998, p. 24). Human oriented elements, including as culture, employees, and leadership, can be used to categorize the influences on knowledge management procedures. These elements that influence knowledge management processes can also be categorized as organizational factors, such as procedures and organizational structure, and technology focused components, including strategies and assessment systems (Heisig, 2009). Human resources applications (recruitment training, performance evaluation systems) and other factors, such as information technology applications, strategic knowledge management, supervisory work, and learning mechanisms, are emphasized as

constituting knowledge management processes in studies of the factors influencing knowledge management processes (Inkinen, Kianto and Vanhala, 2014). In addition, the factors related to the organizational context, such as the support of the top management, the sharing culture, and the reward systems, and the factors related to the technological context, such as the support and effectiveness of information technology, are found to be determining factors on the firms' knowledge management processes (Lin, 2014). As an external environmental component, competitive pressures are analyzed in terms of their determining effect on the firms' knowledge management processes. Competitive pressure as a motivator for businesses to decrease costs, generate competitive advantage, and conduct innovative organizational activities has an effect on the knowledge management processes of the businesses (Lin, 2014). Furthermore, intra-organizational factors are identified as a determinant factor in organizations' knowledge generation processes (Heisig, 2009; Inkinen, Kianto and Vanhala, 2014). These intra-organizational characteristics are influenced by institutional settings. The institutional settings in which organizations are placed can facilitate and influence the acquisition of knowledge by those organizations (Chan, Makino and Isobe, 2010; Gao et al., 2014).

When analyzing the studies explaining the role of institutional environment on knowledge management processes in the literature, it is evident that the issue of knowledge management is discussed with inter-organizational definitions such as knowledge sharing, knowledge exchange, and knowledge transfer (Gao et al., 2014; Zhang and Baoliang, 2017). In this regard as an important innovation driver, the knowledge management processes of firms (Alegre, Sengupta and Lapiedra, 2011; Inkinen, Kianto and Vanhala, 2014; Lin, Che and Ting, 2012) are seen to be studied with definitions such as knowledge sharing and knowledge exchange and transferred knowledge of the firms (Gao et al., 2014). Gao et al. (2014) analyzed the institutional influences on inter-organizational transferred knowledge, also known as the knowledge that firms obtain from external marketplaces. In addition, they investigated institutional influences on intra-organizational transferred knowledge, often known as the interchange of information between organizational units and personnel. And they discovered that institutional impacts had a beneficial impact on the relationships between transferred knowledge (both inter- and intra-organizational transferred knowledge) and innovation. Political institutions are successful in creating and enforcing norms, whereas social institutions are effective in defining

acceptable behaviors; and serve as the foundation upon which businesses will conduct knowledge management activities. Institutions political and economic influence whether the organizational structure and management procedures promote the flow of knowledge inside the organization. However, social structures determine whether an organization's culture is focused on learning and collaboration (Gao et al., 2014). Examining the influence of institutional factors on the connection between knowledge management and innovation. Zhang and Baoliang (2017) highlighted the effects of isomorphism emerging from institutional structure on knowledge searches of organizations in clusters and discovered that normative and imitative isomorphism had favorable effects on exploitative and exploratory knowledge search (Zhang and Baoliang, 2017). Institutional components have a positive impact on the efficient implementation of knowledge management methods (Gao et al., 2014; Zhang and others, 2017). It is believed that institutional effects facilitate the movement of knowledge inside and between organizations (Chan, Makino and Isobe, 2010; Gao et al., 2014; Zhang et al., 2017). Even if there are studies in the literature that discuss the positive effects of institutional environment on the knowledge management processes of firms, it is essential to evaluate whether the institutional environment has a negative influence on the knowledge management processes of firms. In this way, the study's findings demonstrate that normative pressures have a decisive effect on the relationship between the knowledge management process and the innovation inclinations of organizations. This gap is filled by the subsequent finding:

Key Finding 4: Imposed standards have a negative impact on firms' propensity to innovate when they restrict R&D activities and, as a consequence, hinder firms' knowledge acquisition.

# 5.2.2. Pressures from values, norms and customs stemming from industry 5.2.2.1. Industry association- firm relationships

Values, norms, role expectations, obligations, rights, and responsibilities are normative rules that are internalized primarily through socialization processes. Appropriateness, being a member of a group, or the stated schemas for how to perform particular tasks can highlight the underlying logic of normative institutions. Examples of such normative institutions are values, norms, authority structures, duty, and codes of conduct. In regimes such as science, policy, sociocultural, user-marketdistribution networks, and technology and product regimes, normative rules can vary. Examples of normative rules in technological and product regimes (research, development, production) include the rules governing the authority structure of technical communities and the testing methods (Geels, 2004).

Instead of accepting the technical rationale of the internalization in-house R&D research, the majority of executives prefer to adhere to institutionalized norms, values, and taken-for-granted assumptions, which are prevalent in the institutional field. These institutionalized norms, attitudes, and unquestioned assumptions foster a rationale that R&D studies and investments can only be performed with the support and cohesion of the organization. Norms and customs are stimulated by the institutional pressures exerted by the habits that emerge and spread through time among organizations and associations. As previously said, these stimulating norms and customs as institutional pressures remove firms from the rationality to perform in-house R&D studies and reinforce the executives' beliefs regarding doing these R&D-based research within the body of the associations. In this regard, the values, norms, and customs resulting from industry association-firm ties serve as a guiding mechanism for businesses in making these decisions, as internal R&D studies and investments are a key determinant of innovation. Long-term interactions between enterprises and industry associations reveal an industrial relationship in which firms are entrenched in a shared common rationality with habitual consequences such as shared values, standards, and customs. Due to this normative order resulting from these embedded relationships between businesses and associations, businesses share a same rationale on the most effective strategy to manage R&D studies and investment. In this regard, enterprises are shown to internalize the assumption that association-supported R&D studies are the most rational alternative, rather than performing these studies and investments in-house. In interviews where executives explained the reasons for their lack of innovative inclinations, R&D research and investments were cited as insufficient. And in the continuation of these interviews, it is shown that one of the causes of such insufficient R&D studies and investments within enterprises is this shared rationality, norms, and values that indicate the most reasonable method to manage R&D studies and investments within the association. The following are some of the executive's views on the subject:

"We have our own association... The association works on these issues... [R&D studies...] The association gives a ready shape... We produce according to that shape... [We do not have the opportunity to try different kind of production methods within the firm... We only hold meetings on economic issues within the firm...]" (BT, II)

"... [Related to innovation studies that can be done inhouse... Related to R&D studies about production issues...] That issue... There are one or two people among us who are related to the association... They get in touch... We share the information coming from there in the company... [We do not have R&D studies inhouse...]" (BT, II)

"... [For the innovative products... for R&D studies...]... It can't be done with the firm... If it can be done... The association will do it... I cannot afford it as a small company... It has R&D work, or there are something else... I cannot do it... Who can do it...? There is an association in Turgutlu... We have an association called Turgsat... If that association does this... [If these R&D studies can be done, they can only be done by the association...]" (BT, I3)

"... [R&D studies... with innovative products...] A single company cannot do this... No one can do R&D studies... How I do it... How many engineers can I employ...? Joint R&D... There will be an association... [Firms cannot do R&D studies alone... If it happens, only joint R&D can happen... And that happens in the association...]... For example, we have an association... Not all factories are the members of this association... But as I said, if there was such a thing... [If all companies were the members of the association]... And if it has an activity in the association [All the companies become the members of the association and work together in the association not by the in- house R&D studies]... It can be like this..." (BT, I3)

In the institutional field, it has been observed that businesses believe R&Dbased innovation studies can be conducted within the association rather than independently (in-house). The activities that gave rise to and propagated this idea within the institutional field are the result of association-firm relationships that have existed for decades. Thus, the effect of these institutionalized norms, attitudes, and presumptions is deemed decisive for enterprises' R&D-based innovation studies and investments. The fact that these procedures have been adopted similarly by the examined companies has kept them from examining alternative approaches to conducting R&D-based innovation studies and has reinforced the notion that firmassociation relations are the only way to handle R&D studies. Based on the interviews, it is evident that the spreading of these embedded beliefs contributes to the perception that organizations' internal innovation efforts or combined corporate projects may be insufficient. Therefore, the enterprises formed a type of shared view that innovation is not a phenomenon that a single organization can achieve on its own, and that deficiencies in this respect can be eradicated only through the cooperation of associations in terms of R&D studies and investments. The customary industry-firm relationship fosters a set of norms and customs according to which R&D studies and investments may only be done with the support and cohesion of the association. In interviews where executives were asked about the innovation tendencies of their companies, inadequate R&D structures were cited as the explanation for their non-innovative tendencies. And in the continuation of these interviews, executives revealed the restricting impacts of industry-derived values, norms, and practices, which are formed and transmitted via industry association-firm ties, as one of the reasons why there is not enough R&D structure within the firms. The following are some of the executive's views on the subject:

> "Since the products we produce are not very different... We produce the same product... You need to produce a

new product... And in that case instead of producing different products on our own and enter the market... We think that it can be done collectively and promoted more easily... But if we, as Turgutlu, produce a product together in an association... We can introduce it more easily... There is already work on this issue in the association... [Emphasizing that it is more appropriate to conduct R&D studies within the association rather than conducting R&D studies in- house...]" (BT, I6)

"... [Emphasizing the R&D studies about producing new and differentiated products...] These studies are carried out in the association... If you ask about the studies on this subject, you will go and talk to the association... We are partly in it, but we have employees there... They follow it... We only express some of our views at the meetings... So now... I have my own work here... I don't even go there and I don't participate much... I deal with my own business... We have employees in the association... [Referring to the employees who are dealing with the innovation studies in the association...]" (BT, I6)

"We come together through our association... It is not healthy for us to come together one by one anyway... [Emphasizing that there can be only the association channel at the point of strengthening joint R&D studies and establishing cooperation between companies in this sense...]" (BT, I6)

In terms of R&D-based innovation research, the study's findings provided an in-depth investigation of how executive interviewees conceptualized how to execute specific tasks in terms of their respective conceptual models. Firms illustrated the rationale underlying their approaches to R&D-based research and investments in

accordance with these collectively shared normative schemas. Consequently, cognitive schemas about R&D studies as normative forces are also highlighted in the interviews in which executives emphasized the inadequacy of R&D institutions within their companies. Because, according to the schemas that are collectively shared by firms in the institutional field, firms believe that companies that conduct R&D studies on their own are unsuccessful, and that these failed outcomes are the price of departing from collective mind and collective initiatives. In the interviews in which the innovation tendencies of the companies are inquired about, the executives emphasized the inadequacy of the R&D structures inside their companies and, consequently, the rationales driving their approaches as a result of normative constraints. The following are some of the executive views on this subject:

"... Those who made them went bankrupt... [Referring to the factories that made R&D studies and investments on their own]... Let's say, not all of them but many of them went bankrupt... They failed... So what is it, the wolf catches the one who leaves the herd... Our proverb... There are 32 factories here, right... Let's all become members and pay our dues... Look, it is found a kind of mouthpiece in the association... This is R&D work... This is a great research and development which i called mouthpiece... [As the apparatus used in production processes...] I hope, I will be successful and open up the sector..." (BT, 15)

"... We also have a laboratory obligation but we do not run it... Laboratory means the work of the personnel there... It means a lot of expense... Scales were bought there, we have such a place below, measuring instruments and so on... [Emphasizing that the rational thing is to have R&D studies not within the company but through the association...]" (BT, 15) "There is a factory here... This factory tried to make bricks without beams... But it could not succeed... It tried so hard... It is invested so much money... We did not support as manufacturers... That factory struggled alone, it did not work... If I remember correctly, he said 80.000 liras... He spent 80.000 liras and gave up from production... We don't know what happened... Since the man who spent so much has given up... Saying that this thing is closed... No one again... For example, I was not interested either..." (BT, I5)

Activities and expenditures for product and process innovations, such as R&D, are a resource for generating new knowledge and resolving particular and technical issues for organizations pursuing innovation (Prokop and Stejskal, 2019; Hadjimanolis, 2000). The greater R&D effort of a company results in greater collaboration with its clients and research institutes, and hence a greater innovation output (Avermaete et al., 2004). The technological characteristics of industries, as assessed by R&D intensity, are crucial in predicting the propensity of firms to innovate, according to empirical studies. Conducting R&D studies and maintaining an R&D department contribute positively to the innovation propensity of firms (Roper et al., 2000).

Alam, Uddin and Yazdifar (2019) analyzed the institutional elements that are influencing R&D investments from a macro economic perspective. In this view, the effectiveness of the state, the rule of law, and the quality of regulations are highlighted as positive benefits of institutional determinants on R&D investments, whereas corruption and political impotence are highlighted as negative consequences (Alam, Uddin and Yazdifar, 2019). In addition, labor rules, availability to welleducated personnel, the percentage of employees with fixed-term contracts, and proper working arrangements are cited as external variables influencing enterprises' R&D investments (Urbano, Turro and Aparicio, 2020). Yang et al. (2019) reported that family firms tend to invest less in R&D than non-family firms when institutional forces have an effect. In terms of exemplifying institutional effects, family firms that will experience frequent and intense changes in investment financing and operating policies as a result of the increase in turbulence from government policies are more sensitive to cost and risk aversion than non-family firms, and therefore they tend to avoid R&D investments (Yang et al., 2019). Liu et al. (2021) evaluated the institutional effects from the framework of rules and regulations in terms of consumer protection and concluded that R&D expenditures are more successful at boosting company performance in locations with higher consumer protection. While investigating the effects of outside-in networking and inside-out R&D expenses on firm performance, Liu et al. (2021) considered the contingent impact of institutional factors and found that the effects of outside-in networking and inside-out R&D expenses are enhanced by the contingent roles of institutional factors. In addition, there are studies examining the effects of national culture, economic resources, industry, and organizational structure as external effects on research and development outsourcing expenditures; however, institutional factors have not been adequately studied in terms of their role in the relationship between outside-in networking, inside-out R&D expenses, and firm performance (Liu et al., 2021). Examining the significance of institutional determinants, particularly in the local context and excluding state-based institutional effects on R&D expenditures, is therefore a significant contribution to the literature. In light of these considerations, the study reveals that the normative impacts emerging from the local context can limit the R&D expenditures and investments of enterprises, which are crucial antecedents to innovation outputs. Consequently, this gap is filled by the following finding:

Key Finding 5: Industry association - firm relationships have a negative impact on the innovation propensity of firms when they impede internal information creation (R&D).

#### 5.2.2.2. Dominant business processes

Normative pressures result from organizations' shared norms (Munir and Baird, 2006). A normative pressure is produced by widespread ideas regarding the adoption of particular organizational structures or practices. This belief may be fostered by consulting firms, educational institutions, management gurus, or organizations that implement particular techniques. By exerting normative pressure on other organizations to follow comparable procedures, common beliefs radiate a customary level of cognitive legitimacy (Özen and Yeloğlu, 2016). The time

component of normative isomorphism may result from previous stages of normalization of legitimating criteria, such as characteristics and activities linked with mimetic isomorphism. In other words, the qualities and behaviors associated with mimetic isomorphism may eventually become part of the professional standard of conduct in the institutional field (Tuttle and Dillard, 2007).

According to the findings of the study, a common knowledge develops and spreads throughout the institutional field as a result of the enterprises' repeated business procedures. In this approach, it can be observed that a form of collective acceptance on the most effective and logical way to carry out a particular type of business activities is propagated and adopted. This consensus regarding the rational approach to conduct a particular type of business practices generates normative pressure. In light of the study's findings, it is evident that norms are disseminated and embraced by enterprises in the institutional field as a shared understanding of particular types of business operations. It is noticed that, as this common understanding of firms' business procedures is repeated by all field actors over time, it becomes increasingly difficult for a single firm to deviate from the recognized normative order. It is believed that these normative pressures associated with the prevailing business procedures are one of the reasons why the interviewed companies exhibit non-innovative tendencies. Specifically, it is demonstrated that companies cannot comprehend the value of fresh and external information and incorporate past knowledge in their internal systems for innovation outputs due to the effect of the normative order built by repeated business operations in the institutional field. There is a trend among companies in which business units have been eliminated or their effectiveness has been diminished, and knowledge is predominantly outsourced to external actors. Some executives discussing the reasons for their non-innovative inclinations disclosed these obstructive normative impacts associated with the prevalent business practices. Even while knowledge acquisition within the business units is essential for assessing and translating external knowledge for innovation, the executives disclosed that this could not be accomplished due to the dominance of these business procedures. The capacity of a company to accumulate knowledge within its business divisions, as well as its ability to recognize the significance of external knowledge and transform it, are decisive variables for innovation outputs. However, the norms imposed by the companies impede the acquisition and

transformation of this information. Some executives explaining the reasons for their lack of innovative tendencies provide the following examples:

"This affects innovations... [The companies in the sector does not deal with the criteria requirements]... Because these requirements means a new responsibility for them... This time they are avoiding that responsibility... For example, when it is said run a lab, have a quality professions... They say, I should not deal with them... Let me hire an outside consultant and solve this issue with a consultant... The laboratory worker will say something... The other will say something... The uncertainty... [Emphasizing inadequacy of business units within the firms for the assimilation and conversion of knowledge...]" (RM, I8)

"We have such a problem... [Firms habits]... When we try to create such a thing... When it is said that we should set certain criteria from the outside [Criteria to force companies to innovate...] And companies should work according to those criteria... This time industry starts to evacuate those units... It tries to get service from outside... For example, it does not employ quality professionals... It works with one consultant... [Employees cannot become a knowledge asset for companies... Competences cannot be accumulated... Prior knowledge accumulation cannot be created...]" (RM, 18)

"There is such a habit in the sector... The management sees R&D only as an obligation imposed by the legislation... And here it only hires a piece of equipment or personnel as required by the legislation... And it tries not to keep the rest... Even such that there are companies which only hire personnel at the inspection processes only... With the escrow R&D devices taken from the outside" (RM, 18)

"Innovation cannot be made... Once due to the lack of system... It is the same in all the companies... It is the same in big companies... Quality management systems are established... Flags are hoisted at the entrance of the building, but they are not implemented... However, the quality management system is a very good system... Covering all kinds of processes from the request to the finalization process... But not managed in this way... We manage it with the methods we know... When the quality institution comes to the inspection... We start preparing show files, last month... Lack of system within the companies..." (RM, I1)

"Here is the general mentality in the employers and owners of the firms... They see the people they employ as a multipurpose hand tool... When certain criteria are set, the owner of the company who understands that he cannot work his employee out of the work definitions... Began to say there is no need for me here in such an employment... I have no obligation... I can get such a service from outside... This time the staff is vacant... When a certificate is needed or a client requests support... These are solved by personnel relations with one or two such consultants in the sector... Firms say that i do not need to hire a technical staff..." (RM, I8)

Although it is vital for businesses to utilize external information to build their innovation skills, the appraisal of external knowledge and the organization's ability to profit from it is highly dependent on the organization's existing knowledge. Nonetheless, the study's findings indicate that, due to normative influences,
organizations are insufficiently capable of translating external knowledge into commercial meanings. Because organizational routines and procedures that have been handled inside the normative structure might influence the establishment of organizational prior knowledge. This decisiveness of the normative structure in the knowledge transformation processes of businesses is revealed by executives who provide explanations for their non-innovative tendencies. As a result of the adoption and implementation of common standards inside the institutional field, a form of professional autonomy develops, according to the executives. These common and collective norms spread to other organizations within the institutional field. Consequently, all organizations in the institutional field follow and implement similar methods and strategies, regardless of the effectiveness or efficiency of these procedures. These standards can inhibit companies from acquiring the capacity to assimilate new and external knowledge. Some executives, in discussing the causes for their lack of innovative tendencies, disclosed the impeding aspects of these normative effects on the assimilation and transformation of information processes in businesses. The opinions of the executives on the matter are as follows:

> "In order for innovation to occur, we must first need to see what we can do and how much we can do... We must first need to see what we can do under what conditions... So we can plan ahead... But now with these working methods... We have not put a criterion of what we can... When and how... There is a production but mostly it is improvisation..." (BT, 18)

"Learned helplessness in the firms... Adopted traditional production styles... The industry's accustomed to working with very minimal profits... That the company owners' believe in that it is unnecessary to spend a lot of time in research and development within the units... These are the things that prevent innovation..." (BT, I8)

Individual and departmental knowledge formation and accumulation in businesses are influenced by normative forces originating from the dominant business processes. Despite the fact that a company's capacity for innovation is largely dependent on its capacity to transform prior related knowledge into new knowledge, it has been observed that the dominant norms in the institutional field can act as a barrier to the accumulation of knowledge on the human resources base. The ability of an organization to recognize the value of external knowledge and transform it into new knowledge through intra-organizational processes is primarily dependent on the quality of the past knowledge stored within the organization. In this regard, human resource is vital to the establishment of the cumulative structure of these transformations of knowledge. While it is essential for businesses to develop business processes and routines that enable them to increase the knowledge capacities of their employees (as the knowledge assets of the businesses), the findings of this study indicate that dominant business processes can impede the development of effective business processes and routines. In light of the study's findings, the inhibiting impacts of dominant business procedures as normative effects on cumulative knowledge production and human resource transformation are exposed. The following are some of the executive views on the issue:

> "Everything has been subcontracted... Personnel cannot be trained... There is an "ebitda" logic... You are given a target... To increase ebitda... To catch this change, managers from other sectors are recruited... The incoming managers prefer to change rather than existing one... The management also makes profit oriented ebitda pressure... This time, the managers see the first opportunity to maximize profit in a short time... They look at things for 2-3 years... But no one calculates how these things will return after 3-5 years... For example, this is how outsourcing started...One company did it... And the other did it... They sold the success that could come after 10 years... If there can be an innovation, it will be possible with the contributions of these people... They never predicted how far they would take these people away from the job..." (RM, I10)

"There are smart manager types now... Those who come immediately feel the need to discover something... As long as I can discover something, how many years someone else has been doing this job... They say send him... They say let's do this, it is better... And then they don't get anything from what you work for... They messes up the industry, they distributed it... People used to invest in people... [These situations accelerated the circulation]... For example, I do this, but someone else will come and say no we don't do that... [You cannot progress in innovation in this way]" (RM, I10)

"If there is going to be an innovation... The part we develop is the service side... The use of these mixers... The use of these pumps... The timely intervention... These are the parts that will develop and innovate... These always happen with people, the biggest improvement will be with people... I believe that development and innovation should always be planned on people... The reason why I say a mixer operator... The reason why I try to do something with them so that they constantly improve in terms of quality... And I also want that man to always for work me... But for example, 90 drivers came and passed from here... Now we have no chance to plan a change or innovation with such people..." (RM, 110)

"Corporate firms employ subcontractors... There are pumps and mixers at every construction site, but not every construction site has its own person... That is the part where we will innovate... [When that happens, there can't be what I am saying about innovation...]" (RM, 110) "Influences innovation decisions... Doing what you think with a new team will not be at the same speed and safe... I must trust first... Circulation... One team comes in companies... The other team leaves... When that happens, my formation up to that point is also going away..." (RM, I6)

In addition to influencing the development and accumulation of knowledge in organizations on an individual and departmental level, normative pressures resulting from the dominant business processes have a wide range of additional effects. The executives noted that the majority of employee actions are shaped by the dominant norms adopted by the majority of organizations in the institutional field. In other words, the fact that numerous organizations adopt comparable standards for their business procedures has an effect on their employees and, consequently, on the personnel pool in the institutional field. Thus, as a result of the influence of normative constraints on businesses, similar staff structures are developed, and employees within the same institutional field have similar work attitudes. It is claimed, for instance, that the employee behaviors of other innovative enterprises that employ these individuals can function as a barrier, as these employee behaviors are formed by the dominant norms within the institutional field. Some of the companies interviewed highlighted employee resistance to change or employees' routine work practices that are influenced by these prevalent norms. With these freshly hired employees, it becomes difficult for these businesses to design or adopt business processes or routines that depart from the prevalent standards. This circumstance impedes the interviewed companies' innovative endeavors connected to their business procedures. In such a normative order, it becomes impossible to utilize the workforce's aptitude and capability to transform their innate knowledge with their acquired information. This condition is revealed by the executives' explanations for their lack of innovation tendencies, which contain the aforementioned statements. The following are some of the executive views on the issue:

> "While innovating, we encounter negative effects... For example we switched to a new program... An automation program... An online system... Completely with certain

checkpoints and where the work is done with certain authorizations... A managerial innovation... We tell the employee what to do about the system... This time they began to say it is so much work... They began to say I was not doing these in the other companies... The employees are starting to cause trouble..." (RM, I4)

"What is needed to be done for innovation...? Unity and solidarity needed to be increased between firms in the sector... It is necessary to set certain rules... We have a lot of problems with our employees in the sector..." (RM, I4)

"Of course this has an impact on innovation... It is getting harder and harder to find employees in the sector in the industry... You train... You get a mixer operator certificate... You spend money... You waste your time... The man is leaving because of the lack of communication... Because of the lack of a union between firms... As a simplest example, something is stolen from the construction while the concrete is poured... And the employee is fired for the theft... But after that we look after one week later, that operator drives in another concrete company... No firm asks each other... With each passing day, instead of raising the level, we are not able to innovate..." (RM, I4)

The normative pressures resulting from the dominant business processes prohibit organizations from developing the capacity to capture commercial significance not only in technology and technical terms, but also in terms of marketing activities. Companies cannot make the required efforts to implement innovative product renewal and marketing approaches. In addition to their habitual organizational routines, the success of businesses in comprehending and interpreting new information is also impacted by the marketing practices derived from their current normative structure. Due to the normative implications of the embedded normative structure, businesses have difficulty acquiring, utilizing, and changing knowledge that could be advantageous to their marketing ideas. Rather than focusing on innovative efforts in terms of marketing innovations, firms are focusing on gaining market acceptance for their products, according to the findings of the study. Among the executive views on the matter are the following:

> "Our habits are not open to innovation... Habits as I said... Now we have such an order for years... For example, in terms of marketing... We send our products to Balikesir from here... In the first week of the next month, we go and get the checks from the customer... We wander around like a marketer... Such a habitual system has been established... No dealer comes to the factories... Brick has always been the cheapest product in the eyes of the dealers... We made our products cheap... A franchise system has not been established... But for example, it is not so in other sectors... Certain rules have been set..." (BT, I7)

Innovation requires capabilities based on recognizing the value of new and external knowledge, transforming and utilizing it for commercial purposes. The capacity of an organization's existing knowledge to absorb new information is known as its absorptive capacity (Cohen and Levinthal, 1990). Absorptive capacity is a set of organizational procedures and activities that enable an organization to absorb, assimilate, modify, and utilize external knowledge. Acquisition refers to an organization's capacity to acquire and identify information from external sources, while absorption refers to its capacity to build processes and routines that are effective for evaluating, interpreting, and comprehending externally received information. Transformation, on the other hand, refers to the development and refinement of routines that facilitate the combination of existing knowledge, acquired knowledge, and assimilable knowledge for future use, whereas exploitation refers to an organization's ability to develop, expand, and exploit existing routines, innovations, and technologies to create something new based on transformed

knowledge (Adriansyah and Afiff, 2015). In numerous research contexts, the positive impacts of absorptive capacity on innovation have been demonstrated (Adriansyah and Afiff, 2015; Cohen and Levinthal, 1990; Kostopoulos et al., 2011). According to empirical studies, there exists a considerable positive association between organizations' absorptive ability and innovation performance (Kostopoulos et al., 2011). Although absorptive capacity is affected by internal factors such as organizational structure, strategy, leadership, and organizational culture, it is also affected by external influences (Adriansyah and Afiff, 2015). Lau and Lo (2015) explored regional innovation systems as an external element in the absorptive capacity and innovation connection by drawing attention to the necessity of integrating external factors in the absorptive capacity and innovation relationship. Thus, as an external component, the regional innovation systems, which are described as networks of public and private actors engaging and providing mutual feedback in a given region, are analyzed with respect to their role in the dependency between absorptive capacity and innovation performance (Lau and Lo, 2015). In addition, studies addressing the relationship between knowledge absorptive capacity and institutional theory are insufficient, despite the literature's growing emphasis on the effects of institutional environment-related aspects on organizational skills (Ahmad and Ercek, 2018). Using the idea of knowledge absorption capacity, Gunawan and Rose (2014) described the function of the institutional environment in the learning and internalization of external information elements within companies. On the other side, Kotabe, Jiang and Murray (2017) investigated the significance of the national institutional framework in the unifying effect of absorptive capacity as an organizational capability on innovation performance. Nevertheless, according to Ahmed and Ercek (2018), who allude to the aforementioned studies, portraying the institutional environment as established norms and values that are legitimized in the national context leads to ignoring the dynamic and disputed nature of institutional power. Consequently, researching the various influences of the institutional environment and disclosing the effects of local institutional elements on the relationship between knowledge absorptive capacity and innovation becomes an essential problem. In light of these arguments from the study's findings, it has been determined that normative pressures emerging from the prevailing business procedures can be a determining element in the relationship between knowledge

absorption capacity and innovation. Consequently, this gap is filled by the following finding:

# Key Finding 6: Dominant business processes negatively impact propensity of firms to innovate when they weaken absorptive capacity of firms.

### 5.2.2.3. Professional networks

Formal professional institutions that encompass organizational units within the field are one of the sources of normative isomorphism. These institutions influence the field, disseminate standards, and guide other participants (Tuttle and Dillard, 2007). Considered a significant source of isomorphism in the implementation of a number of principles and practices by businesses, the impact of professional networks on the adoption of such principles and practices is deemed to be substantial (Depoers and Jerome, 2018). Normative pressures refer to industry standards that are disseminated through professional networks (Gürlek, 2021; Tuttle and Dillard, 2007; Depoers and Jerome, 2018).

Through professional networks, the study demonstrates, certain changes and new systems can be developed to improve the quality of business processes for organizations in the institutional field. Professional networks comprised of diverse professional actors such as Aselsan, auditing and controlling actors, laboratories, and other institutions affiliated with the Ministry of Environment and Urban Planning can bring about these changes and systems. Hence, as a result of the collective supervision of each professional actor in the professional network referring to their knowledge, there arise normative rules in defining a specific industry standards in the institutional field. And it is anticipated from the companies within the institutional field to conform with these adjustments and industry standards which are brought by these professional bodies collectively. However related with these changes and industry standards which are brought through professional networks; the importance of the compatibilities of the effects created by each professional body in its own field with the other effects created by the other professional bodies within the professional network has emerged. According to the study's conclusions, it is intended to bring about a shift targeted at enhancing industry standards, and enterprises are expected to comply with this change. However, firms reflected the fact that they may have challenges in adopting these change strategies. Moreover, it is depicted that the incompatibility of the effects produced by professional bodies inside the professional network is the cause of these challenges. Some of the executives explain why they refrain from investing in the new technology brought about by the new systems, citing the potential for cost rises and quality issues with the client base. They indicated that these issues arise because the system components are not compatible with one another. In other words, corporations articulated that the incompatibilities between the institutional actors that impose these systems are the cause of these issues. As a result, corporations do not have faith in the new system designed to adapt to changing industry norms, and they can be wary of potential difficulties and malfunctions. Therefore, they resist making innovative decisions regarding the system's processes. This circumstance is a determining factor in the innovation trends of firms.

"For innovation... It is necessary to go through a complete change... [Emphasizing that the functioning of all the actors should be complementary with each other within a system...] We experienced this in the chip incident... [The change in the industry standards which is brought by the professional networks...] The system needs to be done more fairly and more prescriptively... The conditions are not suitable for that chip system... Before that chip system is created, its infrastructure needs to be created... Its infrastructure is not ready yet, that is, the conditions in the constructions... The field conditions, the concrete crushing machines are not suitable for that chip system and for site conditions... The complete construction sector was shaken when switching to this chip system because it was not fully The constructions have come to a adjusted... standstill... [Emphasizing that not all professional bodies who established and implemented this system are compatible with each other...]" (RM, I6)

"First you have to trust the system... You will invest in the technology brought by that system... An expense... You have to believe that first of all... To make that innovation... Nobody wants to do anything without believing that it will work... That it will bring a plus to your company... To your employees..." (RM, I6)

In the interviews, a number of executives underline the significance of the professional bodies' control and auditing functions inside the professional networks. At the time of implementing the intended industry standards and processes, it is emphasized that the technology and human resource pool should be compatible with one another. At this phase, the essential functions of professional groups within the professional network are described. Mentioned is the significance of providing an efficient supervision and control mechanism and maintaining compatibility across professional bodies, as firms may experience cost and accuracy issues owing to incompatibilities between professional bodies. Firms argued that they cannot rely on the system's processes due to the consequences of the professional network's structuralization of industry norms. Instead of focusing on innovation, they concentrate on monitoring and managing their processes within the system. In certain businesses, the explanations for their lack of innovation are as follows:

"In the newly introduced system I believe that the measurement and sampling systems are not done correctly... The data already shows it... You are completely at the discretion of the person... It is always a mystery whether the person who took the sample took that sample correctly... There are building inspectors and laboratories in this system... There are accredited laboratories that take samples for building inspectors... This is open to abuse... [Due to their wrong interventions, although our concrete strength is there be inaccuracies the correct, may in measurements... And this affects us negatively in terms of costs and innovation...]" (RM, I7)

"In the new system it was aimed to increase the quality... [Ebis system which is implemented by the Ministry of Environment and Urbanization through professional bodies within the institutional field]... But on the other hand, we are experiencing very serious problems in the inspection phase... I think that the follow- ups at the sampling stage are very troublesome... We are experiencing serious problems... What are you doing this time...? To provide the desired strength, you increase your cost and dosages... You try some processes... Also to eliminate the personal errors [Mentioning the processes in the inspection and measurement stages]... You also make an extra effort to eliminate sampling errors and sample creasing errors... This is reflected as a serious cost for us... [It creates a constraint for innovation.]..."(RM, I7)

In the interviews, executives stressed the lack of professional standardization to facilitate innovation and the significance of compatibility between the acts of professional bodies and professional networks. The following executives describe the causes for their non-innovative inclinations as evidenced by these inhibiting elements of these normative effects resulting from professional networks on the innovation tendencies of firms:

> "Those machines... Those programs... As I said, it was requested to be included in the system in a way without fully testing the conditions for putting that chip into that sample... It was requested to be included in the system in a way without fully determining the standard that should be... It was desired to act quickly... But it didn't work..." (RM, I6)

> "Innovation means novelty... Innovation means differentiation... It means doing something other than

what everyone else is doing... You need research for this... It is called professional standardization... But some things mostly translated from Europe are tried to be insisted on the domestic market... The domestic market is not ready for it either... When you are not ready, two methods are determined... The first method... After drawing a certain standard, the method of being able to delay the application times from time to time is followed... The second method... It is brought from the top down... Mistakes made... With some penal sanctions, the method of adopting people to this in a short time is followed... "(RM, I8)

Firms discussed their efforts to improve the quality of business processes for organizations in the institutional field through the development and implementation of new systems and modifications facilitated by professional networks. However, according to the executives interviewed, these efforts are futile due to incompatibilities amongst the professionals within these professional networks. In this regard, firms that were interviewed emphasized that modifications to the intended industry standards are only applicable if the effects of each professional actor within the professional network are compatible. According to the findings of the study, attempts to adjust industry standards fail when there is no system for assuring compatibility between the procedures of professional bodies and their functions within the professional network. Executives discussed the negative implications of these incompatibilities connected to professional bodies and their effects on professional network practices. In addition, they noted that as a result of these incompatibilities, improper practices can emerge, which can influence the innovation decisions of companies. The following executives describe the causes for their non-innovative inclinations as evidenced by these inhibiting elements of these normative effects resulting from professional networks on the innovation tendencies of firms:

"... This latest application of Environmental Urbanism is wrong... I think it should be changed and its rules

should be re-implemented... Actually they are doing a great thing... Chips are placed on your concrete... And when your concrete is broken, it is recorded in Ankara... It is coded on a parcel basis... When the customer will buy it, there is a chance to go and see it... But if you don't have the experts and techniques to get this sample right... [Emphasizing the professional bodies which are responsible for implementing different aspects of the system...] If they can't get it, this time you create a lot of chaotic things... Now all the wrong practices affect us... When the wrong sample is taken due to wrong practices, the value of the core is low... It goes to the core sampling again... You both pay for it... And you are in a difficult situation against the customer... Then the compensations and project renewals begin... And when that happens, we move away from innovation completely... Then you become all about saving the day..." (RM, 110)

"A system called the ebis system has arrived... In this system... From the samples taken from presses and constructions, with the chips... The supervision is enabled... I am in favor of the inspection, but while this system was installed... As if one leg of this system was missing... For example, the presses were distributed to laboratories by Aselsan... These presses distributed in laboratories are a little bit out of standard... For example they do not have average apparatus... Since they do not have average apparatus, there may arise different pressures during the crushing... This caused us to increase our costs seriously... Because we increased our dosages and our follow-up more... These are always a cost problem for us... [These constraints are keeping us away from innovation.]" (RM, I7)

Trust is defined as the decision to rely on a partner with the assumption that the partner would behave in accordance with mutual agreements; therefore, in a precarious circumstance, a party's trust can be denoted by a decision to take action that places the other party's fate in their hands (Wang, Yeung and Zhang, 2011). Studies indicate that trust enables organizations to invest more resources in collaborative innovation activities because it reduces negotiating costs, lowers the expenses associated with difficult adaptation, and minimizes long-term transaction costs (Wang, Yeung and Zhang, 2011). Wang, Yeung and Zhang (2011) postulated that when organizations retain a high level of trust, knowledge, ideas, and information can flow freely, hence enhancing firms' innovation performance. The empirical findings indicate a positive correlation between organizations' innovation success and levels of trust (Wang, Yeung and Zhang, 2011). Since a higher level of trust between parties is connected with a greater readiness to share knowledge, so enabling both parties to learn, the moderating influence of trust on interorganizational collaborative relationships has been proven to contribute to product innovation performance (Lai et al., 2011). Wang, Tseng and Yen (2014) evaluated information sharing by individuals using institutional theory and proposed that institutional norms promote knowledge sharing. Thus, they assumed a microinstitutional approach while simultaneously examining the mediating role of trust on knowledge sharing and discovered that institutional norms are positively associated with knowledge sharing and that trust serves as the primary mediator between institutional norms and knowledge sharing. Li et al. (2021) cited Wang, Tseng and Yen's (2014) study in which it is demonstrated that institutional norms have a positive influence on trust in the context of knowledge sharing, thereby demonstrating that institutional influence may also have an effect on psychological variables such as trust at the individual level. According to Li et al. (2021), the connotations of institutional theory imply that it can be applied at multiple levels, including organizational, group, and individual levels. Thus, they examined trust from an institutional perspective and defined three institutional dimensions from institutional theory by highlighting that institutional theory may be used at multiple levels, including organizational, group, and individual levels. These dimensions are conceived as managerial commitment (as the normative dimension at the organizational level), authoritarian leadership (as the normative dimension at the group level), and confidence in the artificially intelligent promoter (cognitive

dimension at the individual level). The findings reveal that management commitment, authoritarian leadership, and faith in the artificially intelligent promoter are all positively associated with trust (Li et al., 2021). In the literature, there are studies analyzing the relationship between institutional theory and trust, but studies addressing the role of institutional pressures in the relationship between trust and innovation are scarce. In light of these arguments from the study's findings, it has been revealed that normative pressures emerging from professional networks can be a determining element in the relationship between trust and innovation. This gap is filled by the subsequent finding:

# Key Finding 7: Professional networks have a negative effect on the tendency of organizations to innovate when they impede the building of trust.

### 5.3. Coercive pressures

#### 5.3.1. Pressures exerted by government

### 5.3.1.1. Regulations

Government regulations, laws, and political power generate coercive pressures (Gürlek, 2021; DiMaggio and Powell, 1983). Among these government regulations, legislation, and political influence, examples of implemented government rules are environmental control, taxation, and accounting requirements. And these established norms can be effective in the emergence of the institutional pressures (Gürlek, 2021). Government regulations can be rules about the legal and technical needs of the state and are the forces affecting organizations in comparable ways (DiMaggio, and Powell, 1983; Tuttle and Dillard, 2007). Every organization is required to comply with these mandatory and obligatory regulations enforced by the government. And organizations that violate these regulations are subject to severe sanctions and penalties (Latif et al., 2020).

Regulations are seen to be established in accordance with three unique mechanisms: command and control mechanism through strict regulations, marketbased control mechanism through economic penalties and incentives, and informal public control mechanism through public influence (Xie, Yuan and Huang, 2017; Han et al., 2021). Regulatory pressures are typically focused on enhancing the environment in terms of pollutant emissions, energy efficiency, and environmental sustainability (Berrone et al., 2013; Garrone, Grilli and Mrkajic, 2018; MoyanoFuantes, Maqueira- Marin and Bruque- Camara, 2018). In addition, administrative agencies can enact regulations to promote market competitiveness, private sector development, and market developments, which are referred to as economic regulations (Sendra- Pons, Comeig and Mas-Tur, 2022).

According to the study's findings, laws serve as a guiding tool for businesses by imposing norms and controls. The enacted regulations establish a legislative framework for firms that determines which issues inside the firm's activities should be accorded greater weight and significance. According to the study's findings, firms' behaviour are influenced by rules. And regulatory pressures are considered as a decisive coercive force in the innovation orientations of the enterprises surveyed. It is observed that laws encourage companies to adopt the mandated processes and structures. In terms of innovation potential, this circumstance can serve as an incentive for organizations to embrace novel practices and structures, but it can also work as a deterrent for enterprises to undertake innovative initiatives for other concerns and domains. In this regard, the restrictive characteristics of the legislation can be detected in the executives' explanations for their non-innovative inclinations, as revealed in the interviews. There are innovation opportunities in the sector, according to the companies, although the stimulating impacts of rules are concentrated in particular sectors. Thus, they tend to adopt innovative initiatives in areas where regulations are predominantly imposed. This circumstance appears as an impediment to organizations adopting long-term perspectives. According to the study, even while regulations are the mechanisms that can push businesses to innovation, their restrictive impacts can keep businesses focused on the short term. According to the findings of the study, enforced laws might be decisive mechanisms for organizations to build long-term or short-term innovation potential exploitation strategies. Some of the viewpoints of executives describing how regulations impact their innovation decisions are as follows:

> "There are many things that can be done in terms of innovation in the use of environmental waste... But the state should do something about it... Since they are more concerned with the quality of the concrete... Since they put pressures on these issues more... Environmental urbanism... Building inspection authorities are putting

more pressure on these issues... It is very difficult to do something in terms of procedures... [It is hard to try to make this innovation potentials happen with the long term focus...] The environment is a little more secondary... But this is a potential for innovation..." (RM, 15)

"... The things that can create innovation are potentials... But there will be a need here... [Lack of a coercive pressure mechanisms...] Because for example, the use of recycling water related to concrete waste... As long as you can find a place to throw these concrete wastes... You throw... If no one says anything, you keep throwing... We continue throwing... Whenever someone comes along and imposes a fine... Then there is no place to throw it... So you have to do something... An investment... And this investment automatically brings innovation... [Unless such mechanisms force... There is no need to invest in such things...]" (RM, I5)

The organizations' explanations for their lack of innovative tendencies highlight the significance of the stimulating impacts of regulations. They noted that the stimulating benefits of regulations are mostly observed in only a few areas, and that this circumstance precludes businesses from formulating long-term preparations for other innovation opportunities in the institutional field. In this regard, firms asserting that their innovations are insufficient due to the limiting impacts of regulations. Companies disclosed that innovative initiatives are more prevalent in places where regulations are more strictly enforced. Consequently, the absence or inadequacy of such forces in other areas prohibits businesses from establishing longterm strategies and prevents them from pursuing long-term innovative efforts. Some of the viewpoints of executives discussing how regulations effect their innovation decisions by focusing on current needs are as follows: "... The things that cause innovation are actually the needs... There may be some obligations, some regulations and some laws..." (RM, 15)

"Innovations... Not at a sufficient level... I have always talked about additives... [Because the pressures in regulations are always concentrated on this issue...] There is a lot to do that the ready mixed concrete industry can do on the other issues in terms of innovation... But these are the issues that need to be dealt with... It is difficult to place a concept in this sector that I can do this and use these residues in this way... Only if the company itself deals with these initiatives... [Innovative processes...] Therefore, I think that we are lacking in innovation in terms of environmental and other issues... [There is a lack of coercive regulations on this issue...]" (RM, 15)

"Related to innovation... In the last 10 years, management systems etc. have become more dominant... As the general sector, I can say that this issue has come to the fore seriously... Occupational health and safety... Related to innovation... Occupational health and safety conditions ranks first among our works..." (RM, I5)

"There are some sanctions... On occupational health and safety... The concept of environmental engineers was introduced... Was there previously... No... It happens with necessity... The state will enforce it... compulsory regulations... The state will make it compulsory... So it happens with it... It does not happen otherwise... [All innovations made happen only in this way...]" (RM, I10)

In addition to the restrictive effects of the current regulations regarding environmental issues, safety, and occupational health, the interviewed firms evaluate negatively the effectiveness of the Turkish Competition Authority and the imposed regulations for preventing the destructive competition movements of the firms. One of the executives explaining why they have a tendency to avoid innovation and why they are unable to innovate successfully cited the impeding impact of regulations on the development of long-term perspectives within the companies. For instance, some of the executives emphasize the fact that enterprises do not engage in long-term planning for human resources because the principles of the legislation are not successfully aimed toward the consolidation of fair competition conditions. Firms assert that the underlying principles of the legislation restrict pricing fluctuations to those that are compatible. In this regard, firms pointed out that regulations are not adequately aimed toward examining whether or not enterprises engage in damaging competition. In light of this, businesses assert that it is impossible to maintain a longterm focus in the current competitive environment fostered by regulatory consolidations. One of the executive views explaining how regulations influence the innovation propensity of organizations when they undermine their long-term focus is as follows:

> "Destructive competition has a negative effect on innovation for us... If indeed the price is good and the earnings are good, the perspective on some things changes a lot... The perspective on the personnel changes... [The absence of long term focus for professionalization and innovation]... If the personnel improvements can be made... Innovations will be made..." (RM, 110)

> "The Competition Authority does not inspect anything... It just inspects the price... But does not inspect anything else... They come and look at the prices if there is any compatible movement or not... About other competitors... They are just looking at this... Is there other destructive competition... Or not... They do not even look at it...

Companies are also making destructive competition... Selling a good for less than its value should be the subject of Competition Authority... So the issue is not just the high price... Thus company managers do not move forward... They do not do the personnel planning more precisely... They are all on numbers..." (RM, 110)

The adopted regulations establish a legislative framework for businesses that establishes the norms and controls for business conduct. As a guiding mechanism, these regulations affect the behaviors and structures of businesses by defining the extent of their compliance with the imposed rules and controls. In the interviews, companies discussed the regulations imposed by government regulatory authorities, such as building inspection authorities, and their ineffectiveness in imposing strong and significant controls for increasing product awareness and altering market preferences. This impedes a structural shift in market preferences that would permit the adoption of long-term technologies and prohibits businesses from being longterm focused. In this sense, the study provides an in-depth analysis of how regulations can force businesses to prioritize short-term repercussions above longterm ones. Prioritizing short-term repercussions above long-term ramifications discourages businesses from pursuing new projects. One of the executive opinions explaining how regulations influence the innovation propensity of organizations when they undermine their long-term focus is as follows:

> "Building inspection firms... They turn a blind eye to everything... They don't impose the manufacturer and say that you have to use this substance here... For example, they don't say that you have to use an impermeable additive here... When they don't impose this... Consumer awareness is like this... This is how consumer consciousness happens... The state exists but these issues are not inspected... We can't be innovative... This time, we can't force engineers, technical staff, contractors... Then, everything turns to the cost focus...

[The current order causes companies to work with a short term perspective...]" (RM, I4)

There exists, according to empirical studies, a positive correlation between regulatory pressures and company innovation (Berrone et al., 2013; Moyano-Fuantes, Maqueira- Marinand Bruque- Camara, 2018; Garrone, Grilli and Mrkajic, 2018; Cai et al., 2020; Kammerer, 2009). According to studies, environmental innovation will rise proportionally as environmental regulatory demands increase. Environmental innovations are innovations that reduce or eliminate the harmful effects of production operations on the environment. Thus, as regulatory constraints on environmental issues increase, the adoption of environmental innovations will increase in order to obtain legitimacy and avoid penalties for noncompliance with rules (Berrone et al., 2013). Firms' product and process energy efficiency innovation activities are influenced by stringent environmental requirements geared toward environmental improvements. Companies are found to make innovation investments in energy efficiency initiatives in order to achieve government-mandated environmental goals and regulations (Garrone, Grilli and Mrkajic, 2018). While indirect environmental rules primarily encourage enterprises to minimize their environmental pollutions through price mechanisms, direct environmental restrictions appear to encourage firms to develop green technology (Cai et al., 2020). Environmental challenges such as energy efficiency, poisonous compounds, material efficiency, and electromagnetic fields are considered, and it is discovered that rules in these areas play a key role in the development of environmentally friendly products. Empirical research indicates that environmental restrictions influence the direction and nature of technological change via the inventive activities of enterprises. Government-enforced environmental rules increase the cost of doing business for businesses, as they must comply with the new regulations. Despite the fact that environmental rules increase costs for businesses, it has been discovered that corporations prefer to improve their manufacturing processes or even produce new goods through innovation in order to offset these expenses. Thus, environmental rules are seen as a driver of innovation aimed at reducing costs associated with complying with new legislation (Debnath, 2015).

While other researches have highlighted the favorable benefits of regulations on innovation outputs of firms, this study provides an in-depth investigation of how regulations can negatively modify the relationship between innovation and organizations' long-term orientation. Long term orientation, which is defined as the degree to which the future is emphasized through actions, is positively associated to organizations' innovation development activities (Barreto, Lanivich and Cox, 2022). In contrast, the role of institutional effects on the long-term orientation of enterprises is mostly examined from the viewpoints of economic policy and shareholder groups. In this regard, it is said that the institutional environment, which is viewed in terms of economic policies and shareholder impacts, is successful in molding the behavior of organizations when they prioritize short-term aims over long-term ones (Sternad and Kennelly, 2017). Although long-term orientation is a significant driver of innovation, there are few studies demonstrating the impact of institutional pressures in the link between long-term orientation and innovation. In this regard, the descriptive explanation of the determining role of regulations in the relationship between long-term orientation and innovation appears as an essential topic. This gap is filled by the subsequent finding:

# Key Finding 8: Regulations have a negative effect on the tendency of firms to innovate when they weaken long-term orientation.

#### 5.3.1.2. Incentives and governmental procedures

The cause of institutional change is the coercive isomorphism that develops directly from the acts of the government (Yalçınkaya, 2018). The state is a rationalizing and assimilating actor that helps to the creation and diffusion of formal structure in order to govern and standardize social units (Özen, 2011, p. 51). The behavior of organizations is constrained by government legislation and administrative procedures of government-affiliated institutions (Yalçınkaya, 2018). The decisiveness of state demands reflects the state's rationalizing function (Yalçınkaya, 2018). The direct and indirect state influence and interventions which are implemented on the sectors regardless of their size, their dependence on imports, their product and market life curves, or their labor or capital intensities cause socially constructed businesses to operate in a legal and political environment (Powell, 1991, pp. 195- 196). Institutions as coercive forces, which are central to institutional theory, function according to formal rules such as laws, regulations, governmental

procedures, and organized structures to direct human and organizational action (Gallego- Alvarez and Pucheta- Martinez, 2020; Peng, Wang and Jiang, 2008).

The importance of the market structure as a determining factor for the innovation tendencies of the enterprises was cited by the executives as one of the most frequently occurring themes in the interview findings. It is stated that the presence of large and diverse initiatives related to the market's demand structure is vital for enterprises' innovation decisions and outcomes. According to the firms, this demand-based market structure can propel enterprises toward innovation. However, they also discussed the impeding effects of coercive pressures on these market consequently, the enterprises' innovation arrangements and, tendencies. Governmental procedures are highlighted as impediments to developing a market structure that will stimulate innovation among businesses. Executives, in explaining why they avoid innovation, cited legal processes in government procedures and how these processes can impede the establishment of a market structure that will entice businesses to innovate. Some of the viewpoints of executives describing how incentives and government procedures influence their innovation decisions are as follows:

> "... It affects investments... The section from Alsancak Stadium to Bayraklı is the section where high-rise buildings will be located... We have been waiting for this for about 20 years as concrete contractors... That is the part that will develop us, the part where innovation will occur... But there was only one Folkart... Mistral and Ege Perla became... [High- rise buildings projects...] But there were 60 projects like this that we followed... None of them were approved... Unfortunately, this procedure part is going very poorly... Project approvals were stopped 3 times..." (RM, I10)

> "If you compare the ease of implementation of those projects in Istanbul and those in Izmir, you will see that we are always surrounded with obstacles... As long as there are no projects, there is nothing that will lift you

up... Neither as volumetric nor as innovation... There is nothing, there is no demand... What can I improve now? When this happens, we always look at the past..." (RM, 110)

The legal framework and procedures designed for government-affiliated organizations such as municipalities, ministries, and their interactions do not facilitate the restructuring of the market base that can compel businesses to innovate. The processes and procedures between government-affiliated institutions play a crucial role in determining the quality and distribution of recognized projects within the institutional field, and hence the demand-based market structure. Some executives' explanations for their non-innovative inclinations revealed that legal procedures in government procedures can impede the establishment of a market structure that will drive corporations to innovation. Some of the thoughts of the executives on this topic are as follows:

"... [Because of these governmental processes, a demand structure that will drive companies to innovation cannot emerge...] For example, they were stopping the project in this Mavibahçe... The people sitting around there, or the lawyers etc... Stopping the project... However, the company has obtained all kinds of legal permissions... They stopped the company, they stopped the construction... For example, they object to something at the beginning about the processes... Whereas the municipality gave a license and TOKI - housing development administration of Turkey- sold it... But for example, they object to a first situation of TOKI when they bought that land [about the buying procedures...] and they stop the firm... Such things happen a lot..." (RM, I10)

"There is no compromise... We could not come together... When they come, someone comes out and

sues and stops the work... Zorlu Holding Company had started a project in Basmane... Now it has gone to another contractor... And that project stopped again... In other words, I do not think that the local administrators here are able to reach a consensus on these issues as a team... If they can do this, Izmir is the place where it will develop the most... [In the emergence of projects that will create innovation...]" (RM, I10)

"... The license was issued... The company hang the sign, so it is legal... For example, if you and I were an investor and went to buy the building from TOKI... So that we could apply for the municipality for construction... But then someone does something... And object to something about the process when TOKI was buying that land... Then they suddenly stop everything... These are negatively affect us... [Our innovative activities...]" (RM, I10)

Incentives and government procedures have an effect as a guiding mechanism in structuring the industry in which firms operate, according to the study. It is shown that government policies create incentives for certain sectoral applications, and that these incentives are effective in structuring the market through the adoption of sectoral applications. Similarly, administrative and governmental procedures of government-affiliated organizations such as municipalities and ministries, as well as their interactions, have an impact on the structure of the industry and, by extension, the structure of the market. In light of the study's findings, it is clear that coercive pressures resulting from incentives and regulatory procedures impose restrictions on certain economic actors while producing advantages for others. The executive views demonstrate that incentives and government procedures can restrain market structure, which can have an effect on the innovation propensity of businesses. Some of the executives discussing the reasons for their non-innovative inclinations disclosed these inhibiting influences of incentives and government procedures on the structure of the market. The opinions of the executives on the matter are as follows: "We always carry out innovation and differentiation studies in brick but we are not successful... Always standard type of brick is used... We produced differentiated products, but we could not introduce these products to the market... [Emphasizing that this situation hinders innovation studies...] Some certificates are not given to bricks... For the products we put on the market, you will first give these certificates to the local authority's building control offices... Then there is another document for the contractors... They should have to get its approval... After that these products can be used..." (BT, I2)

The executives discussed the effects of incentives and government procedures on the structure of the demand-based market. As coercive forces, incentives and government procedures are highlighted in terms of their inhibitive impact on the process of constructing a demand-based market structure that will compel businesses to provide innovative goods. The existence of a market demand structure that is distinct from old understandings and adaptable to new needs is one of the variables that will motivate businesses to undertake innovative activities. However, the functionality of legal and governmental procedures is highlighted as an impediment to the development of such a demanding market structure. The legal framework and procedures designed for government-affiliated organizations such as municipalities, ministries, and their interaction with one another do not aid the process of market structure transition and change. It is noticed that government-affiliated institutions play no part in the transition of the prevalent logic in the market structure into a demand-based market structure that will demand innovations and push enterprises to innovate in this way. Despite the fact that the government and its institutions play a significant role in the planning and transformation of the demand-based market structure, the interviews reveal that innovation initiatives for creating such a market structure are hindered by public permissions, procedures, and barriers. Therefore, in this instance, businesses want to avoid such new projects. Some of the viewpoints of executives describing how incentives and government procedures influence their innovation decisions are as follows:

"For example, I have a study... At the end of the urban transformation process, the residual debris in the buildings will appear in very serious quantities... Where will this rubble go... Isn't it an environmental problem? We did a study about re-using them as concrete... That study was also successful... But how will this study be used... There will be so many obstacles so many procedures... Or bureaucratic... You have to adopt it to the country... How will it be? You have to explain it... It will be with the governmental institutions... They will Environmental give permissions... urbanism... Ministries... Municipalities... In order for this to be allowed, on the one hand, you will try with these permissions, on the other hand you will do your own work here... The thing called innovation happens as a whole, not only with the effort of only one part... You say 'am I going to deal with this... I will take care of my own work'..." (RM, 110)

In light of the study's findings, it is evident that the companies' unilateral efforts are insufficient for the transformation of the market structure and the adoption of differentiated products within the market. Instead of offering benefits for market structure reform, government incentives place restrictions on businesses, according to firms. According to the findings of the study, corporations concentrate on gaining market share with existing products rather than developing new ones. Although the existence of a market demand structure that is distinct from traditional understandings and adaptable to changing needs is one of the factors that will encourage companies to undertake innovative initiatives, it is evident that government incentives do not facilitate the process of transformation and change in the market structure. Some of the viewpoints of executives regarding the insufficient government incentives and their restraining effects on market structure that explain their non-innovative inclinations are as follows:

"... [We can't change the market for innovation...] Even I say to my sales representative friends... I am saying this... 'You used to go, you waited for a while at the sale, and you were looking for ways to tell the customer which brick was more beneficial'... The customer was confused and was leaving without taking the products... Customer was saying let me go and ask to my engineer and then he did not come back... Then I began to say to my sales representatives... 'Sell whatever the customer wants... Because no matter how much you try to raise the awareness of the other side... Is it known....'There is neither purpose nor policy there is nothing...?" (BT, 18)

"For the soil industry the biggest innovation is to produce unplastered but also colored bricks and to unsure that constructions are like this... Production of unplastrered colored bricks... It is possible... If you put some oxides in it, you can get the color you want... So when you heat up the soil, we need to benefit from natural gas so that we can present bricks in a healthier way... Natural gas is very expensive so we cannot do it... [Emphasizing that incentives are insufficient in that regard...]" (BT, 18)

"For example, our roofs are covered with galvanized stone... In fact, if this was covered with electrical panels... If we had produced our own electricity... Actually, it should be supported by the state... It should improve the businesses to compete with the businesses in Europe, but our businesses here are not supported in this direction... You know better than me which businesses are supported... [Emphasizing that incentives are insufficient in that regard...]" (BT, 18)

As formal and explicit guidelines, legal systems and government regulations are viewed as powerful forces that influence organizational responses to institutional environmental protection obligations. Legal systems and government policies can harm or improve the effectiveness of strategic environmental management, according to assessments of the relevant literature (Yang et al., 2018). In addition, an institutional framework, which includes a set of fundamental political and legal ground rules, national governance, and economic liberalization policies, can regulate corporate governance and constrain the management of enterprises. In this sense, the institutional approach investigates the impact of technological skills and technology management on the economic performance of enterprises in the context of the external institutional environment. We find that the moderating effects of corporate incentive mechanisms on the link between technological capabilities-technology management interaction and economic performance are larger for firms located in locations with more established institutions (Wu, Liang and Zhang, 2021). Again based on institutional theory, Gallego- Alvarez and Pucheta- Martinez (2020) investigated how legal systems as government-related coercive constraints influence environmental disclosure by corporations. Under stronger legal systems characterized by the rule of law, the security of property rights, an independent and impartial judiciary, and the impartial and effective enforcement of the law, firms are subject to greater pressure to disclose more information with a higher level of detail and content. It is discovered that the legal system's coercive demands positively improve environmental reporting (Gallego- Alvarez and Pucheta- Martinez, 2020). On the other hand, Liu et al. (2020) analyze firm behavior in terms of innovation intensities when receiving government subsidies as a government-designed mechanism to induce enterprises to engage in particular expected behaviors. Firms execute certain expected behaviors in response to the expectations of local and central government interventions that are incorporated in political logic as part of institutional logic. In this aspect, government subsidies are found to be useful in promoting innovative activity among businesses (Liu et al., 2020). In this context, government subsidies, often known as special financial funds, which require applicants to devote the finances to special activities such as innovation or proenvironmental activities, have been found to be successful at promoting the innovation activities of businesses (Liu et al., 2020). Moreover, Bradley et al. (2021) identified both macro and micro parts of policy design as the institutional

environment's effect on entrepreneurship. Property rights protection, wellfunctioning legal system, free and open markets, regulations, tax code, labor legislation, stable monetary system, efficient bankruptcy code, and low business registration code are referred to as the macro policies of the institutions on entrepreneurship, while financial incentives, indirect subsidies, and training programs are referred to as the micro policies. In this context, institutions and government policies are analyzed in terms of their responsibilities in fostering or hindering innovative entrepreneurship (Bradley et al., 2021). In addition to the aforementioned effects of government policies and incentives stated in the literature research, the study reveals that incentives and government processes restrict the market structure inside the institutional field and negatively impact the innovation tendencies of businesses. This gap is filled by the subsequent finding:

# Key Finding 9: Incentives and government procedures have a negative impact on companies' propensity to innovate when market structure is constrained.

## 5.3.1.3. Regulatory and local authorities

Utilizing DiMaggio and Powell's (1983) institutional field, Rigg and O'Mahony (2013) conceptualize as an organizational field the mechanisms for local government, state agencies, and social partners that provide the framework within which all public and local development services are implemented at the local level. Multi agency collaborations for local issues that are significantly shaped by the funding and performance management arrangements of multiple central government departments can be explained by their institutional embedding, in which local actors may exhibit boundary reinforcing or anti-collaborative behaviors. Consequently, social ties and the structures of these local actors are referred to as socially institutionalized structures with the objective of achieving legitimacy without necessarily considering the influence on efficiency (Rigg and O'Mahony, 2013). Institutionalism varieties such as economic/rational choice institutionalism, historical institutionalism, and cultural/organizational institutionalism can be used to identify resource decentralization and the local level institutions that allow cooperation among resource users (Bartley et al., 2008). In addition to regulatory factors, coercive pressure is another legitimacy-seeking mechanism. While a multitude of elements, including rules and regulations, incentives, and funding, serve as regulatory drivers, regulatory barriers originate from insufficient laws and regulations, weak enforcement capability, complex region-specific regulations, and a lack of government incentives (Do et al., 2022).

Among the executive opinions justifying their non-innovative tendencies, the inability of businesses to develop collaborative initiatives focused on the creation of common advantages for innovation outputs is shown. Despite the fact that firm cooperation is essential for innovation outputs, this type of firm cooperation cannot be established due to the institutional field's lack of unity and habit of operating for the common benefit. The continuation of the interviews reveals that the institutional structure's impacts play a crucial part in the creation of this predicament. Concerning this topic, businesses highlighted the significance of regulatory bodies and their weak preventive systems. In the interviews, the Turkish Competition Authority is criticized for its ineffective action regarding the underpriced sale of goods, resulting in pricebased competition rather than innovation-based competition. In this regard, firms operating in an institutional field where price-based competition is more prevalent than innovation-based competition are more likely to pursue short-term gains rather than contribute to the development of collaborative initiatives for the common good in the institutional field. Consequently, this circumstance emerges as a preventive factor for the improvement of company cooperation, which could be a significant innovation driver. Several of the executives' explanations for their non-innovative tendencies illustrate how regulatory authorities can impede the creation of company collaborations that will propel businesses toward innovation. The executive perspective on this topic is as follows:

> "The Competition Authority does not inspect anything... Just inspecting what..? Just inspecting the price... It does not inspect anything else... I have passed 5-6 Competition Authority audits... They come and look only at the prices... They check whether there is a harmonious movement or not... About other competitors... But there is destructive competition, they do not look at it at all... Now some companies are also engaged in destructive competition... So selling a good for less than its value should be their subject... Not just overselling... I am

trying to say that this will have a negative effect on innovation... If this were not the case, the view on some things would change... Companies are only on numbers [They place more emphasis on short term gains rather than long term gains...]" (RM, I10)

"As an example, in the association we say... The sale price should be 500 cents... We made such a decision... We say no one will sell it for 490... But there is no such a thing... We leave the meeting... We come to our own factories... We call the manager and say... Price of the brick will be 50 cents from May 1st... [Emphasizing that they could not achieve unity even in their price policies...] We have not kept any of our promises... So we say, it will not happen unity in other business areas either... This affects a little bit our common joint initiatives... [Collaborations based on creating common benefits...]" (BT, 15)

Other executives, in explaining their non-innovative tendencies, noted that corporations have difficulty cooperating on topics such as common cooperatives to achieve joint marketing and research and development studies. They added that if they were allowed to form such cooperatives, they would also be able to conduct joint marketing and research and development projects. In addition to the influence of regulatory authorities, it is also suggested that corporations fail to launch these initiatives due to the absence of functional local authorities. In other words, the significance of the effectiveness of local organizations, such as municipalities, which will encourage businesses to collaborate is emphasized. The executive perspective on this topic is as follows:

> "3 factories can merge, 4 factories can merge... A new facility can be established for a common innovative initiative... For the innovation investments... There were efforts for this, but it could not realize... Why it did not

happen... For example, we could not keep the promises we made... We don't have such a union... We haven't kept our promise about the price we gave yet... [We do not create a unity even in the price of the products we offer... How we can create firm collaborations on the other issues toward innovation...] We cannot stand behind the promises we made at the meeting about the product prices that we offer to the market... [Emphasizing the Turkish inadequate preventions of *Competition* Authority toward the prevention of goods being sold below its values and the prevention of triggering pricebased competition...]" (BT, I5)

"... [We cannot even provide unity on price... How can cooperation be achieved on different issues for innovation...] There is no collective work... If that collective work is already there, we would not be like this... You hold a meeting and make a decision... Everyone is overturning the decisions been taken at the meetings... No factory comply with the decisions... Actually, if there was a cooperative here... If they all say with one voice, our brick prices are 50 cents and we do not give less than that... But now that this is not the case... Of course if a cooperative could be established, different things could be happen but unfortunately it wouldn't... [If a cooperative could be established, may be the collaborations could grow even by turning into R&D initiatives...]" (BT, I3)

The findings of the study give an in-depth investigation of how regulatory authorities can have negative effects on formal/informal negotiations and agreements between companies that are geared toward company collaboration for the common good and the production of innovative outputs. Enterprises describing the causes for their non-innovative tendencies described their inability to easily negotiate actions that can be improved and reorganized via the combined efforts of companies in the institutional field. They stated that corporations are unable to engage in these negotiations due to the restricting impacts of regulatory bodies. Thus, they prefer to avoid conversations that could facilitate the establishment of a cooperative environment conducive to innovation development. The opinions of the executives on this topic are as follows:

"... You can't actually do that... [Let's get to a certain level of professionalization for catching innovation through firm cooperation... Let' s put pressure on state institutions collectively to create such a collective benefit together... Negotiations that will reflect on innovation...] It is inconvenient to meet with competitors too much because... [Referring Competition Authority...] In the market, we are inspected about this... And everyone is very scared about that inspection... While trying to negotiate about something different... Unfortunately... Even a small negotiation can be misunderstood about the market...]" (RM, I6)

"Cooperation between companies... That is a very good thing... [About what can be done differently in terms of *Negotiations* about innovation... research and development...?] But about that... There is no such thing... The companies are going to the ready mixed concrete union... There is an environmental committee... Technical committee and you meet... But in the business units... There is no such thing... If you say for example, if the concrete producers gather and negotiate...There is such a thing... Competition Authority... Because of refraining from the Competition Authority... Because it is a situation that can be misunderstood... You cannot come together and negotiate for something... There are holding us back..." (RM, I5)

In light of the study's findings, the effects of local authorities and regulatory authorities in terms of their impeding effect on company cooperation, which is a key innovation driver, are also analyzed. Despite the fact that local authorities are important institutions for supporting and enhancing regional innovation capacity, the results of this study indicate that there is a need for policy enhancements to increase the effectiveness of local institutions such as municipalities in fostering and guiding cooperation between local businesses. In the interviews, executives drew attention to the inadequate support from the local authorities in its role for allocating funds and for its role as a facilitator in strengthening the local environment in order to create cooperation between local businesses, which is an essential innovation accelerator. Executives, in explaining their non-innovative inclinations, highlighted the following impeding responsibilities of local authorities on company cooperation in the emergence of innovation:

"Let me say this... It is also an innovation... We have wastes coming out from our production... We said let's evaluate them and set up a facility... Let's evaluate these brick shards through this way... Let's turn it into micronized flour and mix it into the raw material and let's use it as recycling in the raw material again... But it never happened... We went municipality and said that we have such an idea... We will both gain recycling and it will benefit our costs... Municipality could not show us a place... They could not say here is a 20-decare place, set up a facility there... With at least 20 factories that are members of the association... We say let's establish a company with a capital of 400 thousand lira out of 20 thousand each..." (BT, I7)

"... [Referring to firm cooperation directed toward innovative initiatives...] We can do it... It is not something that cannot be done... But a little more support is needed... Bureaucracy should support it... The state should support it... Unfortunately we cannot see that support... Let's run the raw material field as an association... Now, after all, the company from which we buy the raw material is making money from this work... It costs 40 liras and sells for 70 liras... So, can we cost 40 liras and supply it our other members for 45 liras [The members involved in cooperation...] We can... But this is very procedural... [Emphasizing the importance of local supports...]" (BT, I7)

According to studies on the institutional effects of local government on innovation performance, the quality of local government institutions affects the capacity of businesses to innovate (Andres and Min, 2020). The quality of local government institutions which encompasses aspects such as rule of law, government effectiveness, corruption and the regulatory quality; are found to affect both innovation probability and innovation intensity of the firms. Local government institutions play an important role in reducing the amount of time companies spend complying with government regulations, thereby fostering innovation (Andres and Min, 2020). Rule of law represents if the court system is fair, impartial and uncorrupted while government effectiveness depicts the requirement of time to secure operating or importing licenses. Regulatory quality examines whether tax rates or company licensing are an impediment to business operations, whereas corruption control describes the extent to which corruption impedes enterprises' existing business operations. These institutional variables of the local government institutions have been discovered to affect enterprises' innovation likelihood and innovation intensity (Andres and Min, 2020). Bradley et al. (2021) referred to the institutional environment at both the macro and micro level in terms of macro and micro level policies and their effects on fostering an entrepreneurial and innovative environment. In this regard, elements of the macro institutional environment, such as government policies pertaining to the protection of property rights, a wellfunctioning legal system, free and open markets, regulations, the tax code, and labor laws, are cited as examples of targeted policy interventions on entrepreneurship and innovation. While components of the micro-institutional environment, such as financial incentives, indirect subsidies, and training programs, are cited as instances of targeted policy interventions on entrepreneurship and innovation, these elements
are not considered targeted policy interventions. By examining institutional influences at both the macro and micro levels, Bradley et al. (2021) moved focus to the necessity of evaluating competing policies and policy mixtures for the promotion of entrepreneurial and innovative outcomes. Yi et al. (2020) drew attention to the paucity of research on the role of regulatory institutions in studies concentrating on institutional environment and its impact on company innovation performance. In this regard, with the intention of extending previous research, they sought to determine if and how regulatory institutions, such as state ownership, region-specific marketization, and industry-specific institutional policies, affect the innovation performance of enterprises. They argue that the impact of R&D intensity on innovation performance may vary depending on the level of state ownership, which provides firms with superior access to licenses, administrative privileges, and resources such as raw materials, low-cost capital, and subsidies, in addition to information (Yi et al., 2020; Luo, 2003). Yi et al. (2020) noted that even when two enterprises have a same level of R&D intensity, there may be disparities in their capacity for innovation due to their varying levels of state ownership. This distinction is a result of governmental discriminations that may prevent enterprises from acquiring vital complementary resources to enhance their internal capabilities (Yi et al., 2020). Regional marketization may have an impact on the consequences of state ownership on innovation performance. Important features of the regulatory environments of emerging markets are government policies and regulations connected to market development. Since institutions are dependent on locationspecific factors, regions with a higher degree of marketization are referred to as having well-developed markets and innovation intermediaries. Governments play a significant role in the development of market monitoring systems and the promotion of innovative intermediaries by being more accountable, transparent, and able to implement a series of interventions more effectively and efficiently. In this regard, region-specific institutional impacts, such as the degree of marketization, would mediate the effect of state ownership on innovative performance. In addition to region-specific marketization as institutional effects of regulation, industry-specific institutional policies moderate the influence of state ownership on innovative performance. Institutional differences between industries are a significant source of diversity that can impact the outcomes of enterprises' innovative actions in various ways. Government-implemented sector-specific innovation incentives and regulations may assist some industries more intensively and differently. Government-implemented sector-specific innovation incentives and regulations may result in synergistic effects between state ownership and institutional policies. In this aspect, industry-specific institutional policy moderates the relationship between state ownership and enterprises' innovation performance (Yi et al., 2020). Zhang and Merchant (2020) investigated the role of local institutions on organizational capabilities such as improvisation and learning as a key innovation driver and discovered that institutional elements at the macro and micro levels have an impact on organizations' proficiency and innovation performance. The role of government and its agencies in supporting local businesses by providing needed technology, technical support, important market information, and assisting firms in obtaining licenses for technology import, manufacturing, raw material, and other equipment's; is considered to have a significant impact on innovation capabilities of the firms in terms of improvisation capability - the ability to reorganize, retool, and reconfigure the firm's existing resources (Zhang and Merchant, 2020). Adomako et al. (2021), on the other hand, examined how institutional voids can motivate organizations to engage in inter-firm cooperative engagements. Inter- firm cooperation, which is defined as voluntary arrangements between enterprises including the exchange, sharing, or co- creation of products, technologies, or services (Gulati, 1998), can be affected by institutional voids (Adomako et al., 2021). Adomako et al. (2021) shifted focus to the influence of institutional and government-related factors on inter-firm cooperation as a key innovation driver. When regulatory uncertainty and the absence of a market support mechanism are significant (termed institutional voids), enterprises may be more likely to benefit from government support in the form of R&D funding as an imperfect alternative for strong institutions (Adomako et al., 2021). It is asserted that government assistance for R&D may be an effective response to institutional voids through the establishment of inter-firm links for the acquisition of knowledge, which is a crucial element for enterprises to generate innovation (Khan, Lew and Marinova, 2019; Adomako et al., 2021). Adomako et al. (2021) discovered that the usage of R&D support is positively associated with interfirm cooperation in their study. In addition to government support in the form of subsidies, tax incentives, and loans to mitigate the negative impact of market environment factors, government funding programs for research and development (R&D) have become increasingly important in facilitating the formation of partnerships and the development of innovation at the firm level (Adomako et al., 2021). Nakamura, Vertinsky and Zietsma (1997) analyzed the impact of culture and institutional environment on R&D collaboration between companies. The legal and institutional structure of the enterprises in which collaborative research consortia are embedded can have an impact on the consortia's ability to pursue scale and scope economies in research, share risk, minimize duplication, and utilize firm-specific complementary skills and resources. In this regard, Nakamura, Vertinsky and Zietsma (1997) shifted focus to the macro institutional governance structure as a reflection of national culture by identifying the differences in national cultures between the United States and Japan as a significant factor in explaining differences in organizational forms, strategies, activities, and outputs of cooperative inter-firm R&D activities between two countries. Governments play a crucial role in creating R&D cooperation by removing barriers, developing a legislative framework to discourage opportunism, and reducing uncertainties and ambiguities emerging from cooperative relationships. And this breadth and character of the government's engagement is likely to differ substantially based on the macro institutional environment and the national culture. Nakamura, Vertinsky and Zietsma (1997) illustrated the impact of macro institutional elements on the R&D collaboration experiences of enterprises, given that the forms of R&D cooperation are influenced by the distinctive values and behavioral patterns of each society. In the majority of studies examining the role of local and regulatory institutions on innovations, regulatory mechanisms and government policies are shown to positively influence the development of firm innovations (Andres and Min, 2020; Bradley et al., 2021; Yi et al., 2020; Zhang and Merchant, 2020; Adomako et al., 2021; Nakamura, Vertinsky and Zietsma, 1997). In this sense, in addition to examining the effects of government, local, and regulatory institutions on innovation output and innovation performance of firms, it is essential to investigate the role of these institutions on innovation precursors at the time innovations are revealed in the local context. Although there are studies examining the role of culture and the institutional environment, such as legal frameworks and government policies, on the cooperation between firms in R&D inter-firm cooperation (Nakamura, Vertinsky and Zietsma, 1997; Adomako et al., 2021), it is essential to reveal the role of regulatory and local authorities on the establishment of inter-firm cooperation, including R&D cooperation and other forms of cooperation, in the local context. Regulatory and municipal authorities may have a

negative impact on the formation of inter-firm cooperation as an essential innovation driver, according to the study's findings. This gap is filled by the subsequent finding:

# Key Finding 10: Regulatory and local authorities have a negative impact on the innovation propensity of firms when they hinder firm cooperation.

# 5.3.2. Pressures exerted by other power groups5.3.2.1. Specifications and requirements of customers

Formal and informal coercive pressures are exerted on dependent organizations in the institutional field by other organizations (DiMaggio and Powell, 1983). Coercive isomorphism is the result of asymmetric power relations and is imposed by an external force, such as powerful constituents. These influential constituents may be clients, suppliers, rivals, politically influential referent groups, or influential stakeholders. The processes that explain coercive pressures include transactions with powerful constituencies and the necessity to adapt and comply with the expectations of these powerful constituencies (Tuttle and Dillard, 2007).

The dominating organizations in a field may exert coercive pressures over limited and vital resources and demand that dependent organizations adopt specific structures or practices that serve their interests. In order to ensure their own survival, organizations depending on resources may comply with the demands and expectations of powerful organizations (Palmer, Jennings and Zhou, 1993; Dinçer, 2013). In this regard, coercive pressures can arise not only from government regulations, legislative procedures, laws, and regulatory bodies, but also from other powerful constituencies, such as the specifications and demands of the dominating customers in the institutional field.

It is evident from the interviews that some of the coercive pressures emanate from influential stakeholders, such as dominant consumers. Customers' specifications and criteria are viewed as coercive constraints that other companies must comply with in order to participate in their initiatives. Work procedures and production techniques reveal the breadth and depth of the specifications and requirements of these prominent customer organizations. These huge and dominating clients require that the other businesses employ identical procedures and production practices. And these pressures can force the interviewing companies to implement procedures, work systems, and production techniques that are compatible with client demands and requirements in their own manufacturing facilities. As a result of these coercive pressures from dominating clients, enterprises are undergoing innovative improvements in their own facilities and adjusting to customer specifications and criteria in order to be admitted into projects. Several participant views on how the specifications and requirements of large and dominant companies can stimulate innovation in the interviewed companies are as follows:

> "Our innovation comes from big companies... Those big companies want special concrete... They want some studies from us on this subject... There was a dry system in our facilities in the past... But now the system has changed... Wet system came... This happened with the big companies' requests..." (RM, 15)

> "When you look at the big companies... When they make a change... In their projects, you have to go through a change because of the concrete they pour... You also have to produce a product close to the product they want... [Forcing us innovation in order to be accepted to the projects...]" (RM, 13)

Customer-articulated technical standards, product specifications, and functional needs are examples of formal/regulatory rules, and these formal/regulatory rules serve as stabilizing mechanisms for established systems (Geels, 2004). In this regard, customer articulations highlight the principles that are organizing established systems that describe how the items' standards, specifications, and requirements should be. In the participant's opinion, when coercive forces increase, the significance of customer articulations in encouraging organizations to innovate becomes apparent. One of the participant's perspectives, emphasizing the significance of customer pressure in stimulating innovation in businesses, is as follows:

> "Drivers of innovation... The coercive influences from the customers... What we prefer the most... We wish our

customers were a little more conscious of things that lead us to innovation... [Coercive pressures related with the specifications...] Then, more different products come out of us..." (RM, 15)

In the findings, it is evident that the pressures exerted by power groups, such as market-dominant consumers, influence numerous elements of the behaviors and structures of other enterprises in the institutional field. The requirements and specifications of these influential stakeholders can govern the business processes and practices of other firms. According to the study's findings, powerful actors in the institutional field can require other organizations to adopt certain structures and procedures that serve their interests via imposed project specifications and requirements. These coercive constraints can persuade businesses that wish to preserve their existing resource flows to comply with these required criteria. These formal forces are put on firms by other organizations on which they depend, and they similarly influence the firms. According to the opinions of the executives interviewed, at the time of implementing technical and managerial innovations, companies adhere to the required adjustments in accordance with the demands and requirements of the projects of powerful actors and do not demonstrate opposition to change. The following are the opinions of executives regarding how the specifications and requirements of customers positively impact the propensity of enterprises to innovate when they shift their mindset toward change:

> "Big companies have their own specifications... There is a wet system requirements in their own specifications... [As a production techniques]... You need to comply with these specifications to work with them... Because the concrete class required in these projects is high... And the dry system is more disadvantageous in high- class concretes... The wet system is required to be present in those big projects... [Customers influence innovations...] We converted our facility to the wet system as an innovation..." (RM, I5)

"We have corporate customers... To be able to work with them... They generally do government work... They receive TOKI tenders... "TSE" Turkish standards institute is indispensable for them... We always feel that pressure from them all the time... If you work with them, once your brick has to be very stable, the quality has to be constant... Because they also have a controller and they get progress payment accordingly... [We are always searching for the ways... For the improvements in bricks...]" (BT, I2)

"... That is what happened in occupational safety... [In terms of managerial innovations...] How the projects and specifications have changed our perspective... Many construction sites are now taking strict measures regarding occupational safety... We learned a lot about occupational safety from there... Then we applied it in our own facilities... We did these changes in order to be able to do that job... To able to get these project..." (RM, 15)

According to the results of the field study, the coercive pressures of powerful consumers have a positive effect on the opinions of the questioned executives that change will bring benefits. The examined firms have acquired positive attitudes toward change in the idea that the change will bring benefits and do not exhibit resistance to change as a result of the coercive pressures exerted by client specifications and requirements. Positive attitudes have been labeled as openness to change and receptivity to change. Negative attitudes, on the other hand, have been labeled resistance to change, organizational inertia, and change scepticism (Henricks and Kehoe, 2020). Participants claim that they evaluate and quantify client requirements as part of their own internal processes, a circumstance that influences their viewpoints in numerous ways. Through these coercive influences, they develop a positive attitude towards change as a vital innovation driver, rather than growing aversion to change. In fact, as a result of this circumstance, participants report that

they are implementing innovative efforts in many processes and production points within their own facilities; improvements that go far beyond the scope of mandated projects. The following are the perspectives of executives regarding how the specifications and requirements of customers positively impact the propensity of enterprises to innovate when they shift their mindset towards change:

> "We bought a project on Aliağa side... Project Owner Company asked us... Did you not have a wet system? We said ok... It was a requirement of the specification of that project... We converted our facility to the wet system... When we looked, we saw that it had more advantages... We obtained a certain statistics... Later on, we concerted all our facilities to the wet system within 8 years..." (RM, 15)

> "Big projects have technical specifications... They have controls... They have their own technical team... Otherwise, you are building a normal residential building... There's a civil engineer there... His demand and the demands on the other projects are different... They develop us... They change our perspective..." (RM, 15)

> "We work more with big projects... Its advantage is for us... It provides innovation potential... At the same time, we see a change... That is, you can leave it there... You can leave the project and its requirements there... But the important part... I feel the need to implement it... I say, yes, this is very good... It changes my perspective... For example, after these projects, we established the occupational health and safety management system... Here we established 18001... After that project... After the project in Aliağa, we established those systems in our all facilities..." (RM, I5)

"The specifications and the requirements of the projects... So when you look there, a company made the bridge... And they're so meticulous... They're meticulous, so they're perfectionists in everything... In projects like that, you see it, you learn it..." (RM, I4)

In addition to state-based coercive constraints, empirical research indicates that coercive forces exerted by other powerful actors have a positive effect on enterprises' innovations (Waggoner, Neely and Kennerley, 1999; Dubey et al., 2017; Wang et al., 2018; Abayomi et al., 2020). There are a number of factors that have a positive impact on the innovation activities of organizations, including regulations, market mobility, and information technologies. However, variables such as the drive for legitimacy, the pressures of other organizations, and the dynamics originating from the power balance can also have a positive impact on the innovation outputs of corporations (Waggoner, Neely and Kennerley, 1999; Dubey et al., 2017). As a result of such coercive pressures, firms' changes in their processes and managerial practices are revealed in the literature via several studies (Dubey et al., 2017; Wang et al., 2018; Abayomi et al., 2020). There are examples of coercive pressures exerted by large enterprises on the companies they control in order to spur innovation. The implementation of performance evaluation systems (Dubey et al., 2017), the adoption of modular product production (Wang et al., 2018), and the incorporation and adoption of various technological applications (Abayomi et al., 2020) are examples of innovation adoptions caused by the coercive pressures exerted by powerful firms on the other dependent firms. If the other corporations do not operate in accordance with their own interests and expectations, powerful and resource-rich parties can apply coercive pressures such as sanctions and contract terminations. These powerful actors can impose operational practices and structural requirements on other organizations with whom they conduct business in order to achieve outcomes that are advantageous to their own interests and objectives (Zhu and Sarkis, 2007; Liu et al., 2010). Although there are studies describing what these coercive impacts are and what innovative outcomes they produce in other organizations, there are few studies explaining how these coercive pressures affect the innovation inclinations of organizations. In this regard, it is essential that the study's findings indicate the

decisive impact of large corporations' coercive pressures on the relationship between organizations' attitudes toward change and innovation inclinations.

On the other side, the positive attitude of executives toward change fosters an environment that is conducive to innovation. Especially during the implementation phase of innovations, the attitude of executives toward change is crucial to ensure coordination and dispute resolution across organizational units and personnel. The definition of the term 'attitude toward change' is the extent to which managers and other dominant coalition members are in favor of change. Empirical studies have demonstrated that the attitudes of managers toward change have a positive impact on innovation (Damanpour, 1991). The innovative approaches in organizations' competitive strategies are determined by the executives' attitudes toward change (Musteen, Barker and Baeten, 2010). Instead than focusing on innovation, firms led by leaders with a conservative view of change choose to capitalize on existing advantages and pursue defensive strategies. The organizations run by leaders who are receptive to change embrace research-driven innovation discovery tactics (Musteen, Barker and Baeten, 2010). Although attitude toward change is a significant predictor of innovation, there are few research showing the impact of institutional pressures in the relationship between attitude toward change and innovation. This gap is filled by the subsequent finding:

# Key Finding 11: Specifications and requirements of customers positively impact propensity of firms to innovate when they embrace a change orientation.

### 5.3.2.2. Politically powerful institutional actors

Coercive isomorphism is the result of political forces and the legality problem (Dinçer, 2013). In a complicated legal and political context that is influenced by the expectations, practices, and agreements of various interest groups, organizations develop a network of rule-making and sanctioning activities. An external regulating authority properly enforces norms, structures, and practices within such a network (Dey, Milem and Berger, 1997; Dinçer, 2013). Lobbying groups exert a significant amount of influence over legislative choices. Political lobbying allows corporations to get access to laws and regulations, allowing them to influence policy decisions and new laws. Lobbying groups are the institutions' most important stakeholders.

influence the sector's regulations, imposed standards, rules, and compliance habits (Nurunnabi, 2015).

Based on the interviews, it has been determined that politically influential actors have an impact on the legitimization of commonly accepted sectoral applications and practices. In the adoption and spread of sectoral applications and practices, the impact of these power groupings on government channels inhibits the acceptance of alternative and alternative sectoral applications and practices. Consequently, the present institutional structures empower and promote the applications of embedded key constituents, such as politically influential actors. This circumstance influences the structure of the market by preserving the applications and practices of dominant organizations while impeding the acceptance of alternative applications. When asked about their innovative tendencies, the interviewees emphasized that they could not conduct many new studies on their present product lines. Because they indicated that, due to the structure of the used raw materials, there is some room for innovation within their present product lines, to a certain extent. According to firms, the ability to produce their existing products in new domains could increase innovation potential; however, this is not achievable due to the dominance of politically powerful actors over the market system. Because these coercive effects prevent organizations from realizing their production and innovation potential in several domains. The executive perspectives characterizing the effects of politically powerful actors on the market structure through the establishment of acceptable sectoral applications and their inhibiting effects on the enterprises' innovation tendencies are as follows:

> "... Concrete roads... Currently being built in Manisa... It did not become widespread... This was an innovation for us... Why was it an innovation...? Because finishers are used on concrete roads... Pump is not used... Mixer is not used either... This would cause a lot of change in the sector... Why... There would be demand for those machines... And concrete would be designed and produced accordingly... That would open a different path for us... [Differentiated products...]" (RM, I10)

"For creating a change in concrete- related productions... [For innovative studies in different fields]... We attended many conferences about the construction of concrete roads... Why can't concrete roads be built? Petroleum... There are actors who show petroleum as a trump card in their hands..." (RM, 19)

"... The life of asphalt is one- tenth of the life of concrete... But still why don't we build concrete roads, but asphalt? Because of certain actors... Why doesn't Turkey enter concrete road production...? Certain actors don't want this... It has some income from using petroleum and making money from it... [They put more pressures on the state...]..." (RM, I9)

"... [For more innovative processes... To change the course of the industry...] The giant companies in the sector... [Power groups interferes...] We think that roads with concrete infrastructure are not that developed in Turkey... It may be preferable in the future, but this is the preference of state institutions, the preference of new projects at work... It is usually on asphalt... There are powerful companies in the sector..." (RM, I3)

The study provides a comprehensive analysis of how politically influential actors generate a favorable market structure for lobbying activities. It is observed that the legitimizing acts of politically powerful actors influence product selection, allowing these lobbying actors' products to be widely viewed as more rational. And the institutional structure that supports these politically powerful entities does not question the suitability of their products in comparison to other product choices. In this manner, a degree of rationality is established in the market structure for widely approved products. However, in the interviews, firms acknowledge that it is difficult to use some items in certain applications, but the current institutional structure does not preclude this rationale. It is evident that the legitimizing efforts of politically

influential actors can impede the market proliferation of more suitable alternatives. The influence of these coercive market forces has a negative impact on the innovation inclinations of the interviewed companies. One participant's perspective on the topic is as follows:

> "Customers got used to the same products from us... Because it is always taken so easily... They are used to... [Why would we launch a new product... The market already wants this from us...] We had a construction ban due to an earthquake for a while... Then a tender was issued and earthquake houses were built... The first projects that came out were aerated concrete... In other words, all buildings will be made of gas concrete... We took the list to see which companies got the job... Certain groups own these companies... There is a political pressure from above... [We cannot produce and innovate in different fields...]" (BT, I7)

> "... For example, in hospitals... A project havelaunched which is stating that aerated concrete will be used in new hospitals... Whichever is the relevant construction unit of the ministry of health...? We went to Ankara, talked to the undersecretary... But no progress were made... We say, why you are using these products... That is health sector... That is the hospital... Because there are chemicals in it... Some concretes are not allowed to be used in any hospital abroad... The pressures of the lobbies in Ankara come to the fore here..." (BT, I7)

> "For example, gas concrete products, these are not comparable to bricks... Companies say that the insulation is good and the strength is strong, but it is not... But it sells in the market..." (BT, I2)

"Same dimensions of pumice... Same heat treatments... Same heat values... Even heat... With brick material... But we couldn't put these productions on the market..." (BT, I2)

Through the pressures of politically powerful actors, the study reveals that a certain type of products and production processes have been adopted and established in the institutional field. Despite the fact that various products and alternative production processes may produce more rational and efficient outcomes, there is significant pressure to retain the status quo. This pressure is the result of politically influential actors and their influence on government channels. Participants opined that the transition to alternative production methods may pave the way for innovative processes in the sector, if not for the prevalent and dominant commercial logic and rationale. This dominant and prevailing market logic and rationality is molded by the pressures of politically strong entities. Because it is evident that politically dominant actors have control over government regulations via government channels. And these coercive pressures produce a market structure that determines which items and production techniques will be accepted and propagated in the industry. These coercive influences are cited as impediments to organizational innovation by the interviewed businesses. In another way of putting it, these coercive constraints create a market system that favors politically powerful actors. Consequently, these coercive pressures result in the homogenization of approved products and production methods to the benefit of politically influential actors within the business. The firms that provided explanations for their non-innovation tendencies highlighted the effects of politically influential market structure actors. The executives highlighted the effects of politically powerful actors on the structure of the market by providing a more favorable institutional environment for certain types of products while directly stifling other, more suitable products. In their innovation tendencies, they indicate the processes that are effective in this regard as follows:

> "... Product differentiation studies are not successful... The same brick has been used for years... You need a serious lobby to get a share in the market... For example, there is a certificate for pumice in the regions

determined for thermal insulation... It has a national technical approval certificate called document which we call the "UTO" certificate... With this document, pumice can be used without the necessity of sheathing... There is a certificate for pumice... But they did not give this certification to the brick..." (BT, I2)

"We are always making differentiation studies in bricks, but we are not successful in putting them on the market... This influence the innovations... Now we have withdrawn from the facades of buildings for about 10 years... Market do not use bricks on the exterior parts of the buildings... Our bricks are only used in interior partitions for 10 years..." (BT, I2)

Due to the isomorphism that is defining the dominant logic in production and sectoral applications as a result of the coercive impacts of politically powerful actors in the institutional field, other businesses have trouble bringing their products to market. The adoption of specific trends in the sector due to the coalitions made by the powerful firms through the state may be the explanation that affects the innovation tendencies of the examined companies. Due to the consolidation of politically powerful actors in the institutional field and the resulting homogenization of the dominant logic in production and sectoral applications, companies with noninnovative tendencies reported that they were unable to get their products accepted on the market, despite the fact that their materials-based products were superior. Some of the executive explanations for their non-innovative inclinations highlighted the following situations:

> "... For a joint R&D... To be able to form a joint venture with the factories here... Such things do not happen... You need to have a lobby with the state in order to do these things... [How to spend on research for products that cannot find a place in the market] If it had a lobby, they would have decided in your favor... You would sell

more... If they don't use styrofoam products, pumice products now... They will use brick products... But because it is not like that... For example, there is a pumice factory in Isparta... In Isparta, the municipality has a pumice factory, they don't allow bricks to be used there... Why... The municipality... "(BT, 13)

"A lobbying has been established for this.. It out weights... For aerated concrete... But it has not been established about brick..." (BT, I4)

Concentration of the market is an expression of market structure. There are research that investigate the connection between market structure and innovation. These studies indicate that market concentration has a negative impact on enterprises' innovative efforts (Koeller, 1995; Acs and Audretsch, 1990). High market concentration refers to a condition in which large and powerful enterprises continue to increase their market share. According to studies, there is a negative correlation between market concentration and innovation. And these studies also demonstrate that this unfavorable association is at varied levels according to the size of the organizations. Compared to large businesses, the detrimental impact of high market concentration on innovative activities is more pronounced for small businesses (Koeller, 1995; Acs and Audretsch, 1990).

While there are research that emphasize the decisive effect of market structure on innovation outputs, it can be seen that the literature studies that study the function of institutional effects on this relationship (market structure and innovation) concentrate primarily on particular points. In these research, the institutional effects on the relationship between market structure and company outputs (such as innovation and organizational efficiency) are evaluated primarily within the context of government rules, incentives, and policies (Chan et al., 2015; Zhang et al., 2019). According to Chan et al. (2015), market concentration has negative effects on the productivity of enterprises (banks), but these negative effects diminish when institutional variables increase. As the effects expressing the institutional framework, financial freedom, foreign ownership and expansion, political stability, and regulation quality are explored as the determining institutional factors on the link between market concentration and organizational productivity (Chan et al., 2015). Zhanget al. (2019) brought attention to the deciding effects of the competitive market structure, resulting from institutional effects, on the success of the product and process innovations of enterprises. Institutional factors, such as patent and copyright infringement, widespread copying of unique inventions, and contract violations, to which enterprises are subject, can lead to dysfunctional competition and severely impact the product and process innovations of businesses (Zhanget al., 2019). In addition to the effects of government-based institutional factors, which are frequently discussed in literature studies, it can be seen from the study's findings that pressures exerted by other power groups, such as politically powerful actors, also influence the market structure and innovation relationship. In this sense, defining these impacts descriptively arises as a significant issue. This gap is filled by the subsequent finding:

Key Finding 12: Politically powerful institutional actors have a negative impact on the innovation propensity of firms when they constrain market structure.

# 5.4. A Unifying model

Figure 1. depicts a unifying model that is described in the subsequent section in light of the previous section's explanation of the key findings.



Figure 1. The unifying model of institutional factors and innovation propensity

#### 5.4.1. Implications for theory

To comprehend the notion of innovation and the elements that influence the innovation decisions of companies, it is essential not to examine these concepts in isolation from their institutional context. However, the majority of available research examines innovation and its predecessors versus individual characteristics. In these empirical research, the precursors of innovation are studied in terms of theoretically specified, predetermined variables. Similarly, innovation research on Turkey consists primarily of quantitative studies with dominating theory-testing research approaches, reflecting a universal rationality worldview. This position raises the question of how appropriate these ideas are to the local setting.

On the other hand, there are studies that emphasize the significance of examining the concept of innovation within institutional approaches, wherein the local context and institutionalized structures are an integral part of the innovation analysis and help to conceptualize the dynamic interaction between actors and structures (Geels, 2004). Studies that switched focus to the significance of the interaction between institutional environment and the concept of innovation highlighted the significance of studying the innovation premises within institutional approaches (Hadjimanolis, 2000). According to Trott (2008), technology is a socially and institutionally rooted process, and innovation cannot be separated from both the local-national setting and the political-social processes.

In addition, as the scientific and technical landscape evolves, technological advancements occur. However, technical advances do not emerge in a vacuum, as they are dependent on organizational context and societal shifts. Multidimensional studies on innovation, for instance, emphasize the need of considering the interaction between physical space, institutional and regulatory jurisdictions (De Pra Carvalho et al., 2017). Innovation emerges as a result of the interaction of numerous processes that generate elements, networks, and niches that are developed from the moment they are legitimized. In this way, innovation as an interaction of processes displays a dynamic nature that begins with experiential learning, the viability of rules, cognition, and local practices that become the formal rules and regulations of the interaction between institutions and processes in the environment and the social process. By virtue of laws, regulations, conventions, routines, or the impact of other institutions, innovation is dependent on certain patterns of interaction and is, thus, a

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compromise between organizational and institutional networks and their constituents (Geels, 2010; De Pra Carvalho et al., 2017).

Not only is it vital not to approach the concept of innovation in isolation from its institutional framework, but also the manner in which the concept of innovation is handled and addressed is a crucial factor. In this context, a few recent innovation studies emphasize more explicitly the significance of the system approach, with a focus on the interconnections between system elements, and so view innovation as a co-evolutionary process (Geels, 2004). Thus, "systems of innovation" has developed as a new topic as the scope of innovation study has expanded from artifacts to systems, from individual organizations (often enterprises) to networks of organizations (Geels, 2004). Systems of innovation approach depicts a system or group of firms engaged in developing and producing a sector's products and in generating and utilizing sectoral technologies via interaction and cooperation in artifact-technology development and competition and selection in innovative and market activities. Despite the fact that the innovation concept has evolved into the concept of "system of innovation" with these new approaches, the "system of innovation" concept appears to be expanded to overlap with other concepts such as "technological systems" or "large technological systems" by including the social contexts of the actors in these systems to which they belong.

With the analytic extension of socio-technical systems, it is easier to examine the elements of sub-functions and social groups within the innovation systems analysis, given that capital, knowledge, and labor are not located in the same producer as they were in previous centuries. Especially as a result of low-cost efficiency systems and mass manufacturing techniques, product networks have expanded, resulting in an expansion of social groups inside innovation systems (Geels, 2004). Thus, a "technological system" is described as a network of agents engaging in a certain technology area under a specific institutional framework to develop, distribute, and employ technology.

Technological systems encompass networks of actors, which allude to social systems, and as a result of this broader perspective, the value of knowledge or competence flows is highlighted more than the importance of conventional products and services (Geels, 2004). With the broadened perspective from sectoral systems to socio-technical systems, it is possible to make an analytical distinction between the following elements: systems (resources, material, and technical aspects of

production), actors involved in maintaining and changing the system, and the rules/institutions that guide actor's perceptions and activities. Actors are social groups whose roles, duties, conventions, and perceptions are entrenched in sociotechnical innovation systems. Consequently, sociotechnical (ST) systems are the result of human agents. Human actors, organizations, and social groupings function within the environment of rules, and their views and interactions are governed by the rules and institutions. In addition, the other parts of ST systems, such as system and institutional regulations, re (create) meanings and links reciprocally in ST-systems, just as actors do, as actor-network theory illustrates. The central question of actor network theory is "how can things, people, and ideas get interconnected and integrated into larger units?" And this subject is clarified using actor network theory principles such as heterogeneity, symmetry, and translation processes. The heterogeneity principle is characterized by the diversity and multiplicity of actors, which derives from the notion that the existence and success of an innovation depend on the diversity of people and objects from many horizons. Human (individuals, organizations) and non-human (artifacts, inanimate objects) participants in an innovation process are contacted, interested, enrolled, and mobilized. Thus, innovation is dependent on the diversity of people and things from many vantage points. In addition, according to the principle of symmetry, there are no distinctions between these many actors because they all contribute to the innovation development process (Aka, 2019). This symmetry concept is characterized by the equality and reciprocity of actors, and all participants are essential to the innovation process. Moreover, they influence each other, therefore they are reciprocal. Consequently, according to actor network theory, actors influence one another. The third principle of actor network theory describes innovation as a process, a translation in which actors, both human and nonhuman, continuously negotiate and change the social (use) and technical (functionality) qualities of innovation over time. Thus, innovation can only be produced if the innovator constructs a network that combines uncommon links between human and nonhuman agents (Aka, 2019). In this view, not only do actors influence the elements of the sociotechnical system, but all aspects of the sociotechnical system influence and form one another through their interconnections and interactions (actor- network theory). Geels (2004) established these interrelationships and interactions between the constituents of the ST-systems, thereby classifying the

sociotechnical system into three segments. In the first section, the interaction between actors (human actors, organizations, and social groups) and rule-institutions is defined: actors function within the context of rules, which implies their perceptions and (inter)actions are governed by rules and institutions. In addition, performers simultaneously carry and (re)produce the rules (Giddens-structuralization theory). In the second section, the interaction between actors (human actors, organizations, and social groupings) and systems is outlined; systems are defined as a collection of artifacts, resources, and material circumstances. Systems do not operate on their own; they require the participation of actors. However, systems (artifacts, material conditions, technical systems, and other production-related technical structures) can serve as a framework for action, thereby enabling and restricting actor interactions (actor- network theory). At the third part of the ST-systems, system and ruleinstitution interaction, it is specified that systems, artifacts, and material condition shape the rules and standards, so that interpretive flexibility is bound by technical/material capabilities (actor- network theory). In addition, rules are inscribed not just in the thoughts of the actors, but also in artifacts (such as Latour's scripts and actor-network theory).

In a system where innovation is viewed as a co-evolutionary process, it is necessary to combine all the derived aspects of the innovation systems in terms of their influence on each other and, consequently, on innovation. Geels (2004), for instance, stressed this multi-level feature for the structural basis of innovation system processes, which consists of three essential levels: niches, regimes, and panoramas (De Pra Carvalho et al., 2017). In this innovation system approach, innovation is seen to be comprised of organizational and institutional networks and their constituents, with innovation described as a socially interactive learning process based on the outcomes of social constructs (Geels, 2010; De Pra Carvalho et al., 2017). In light of the fact that most studies of innovation in the academic literature are empirical in nature, it is crucial that elements influencing innovation not only be studied as independent variables, but also as components of a system. This analysis will disclose their consequences in terms of their interrelationships and, consequently, their effects on innovation. This broadening of innovation studies' perspective will serve in making analytic distinctions between innovation precursors, institutional environment, and innovation output elements and including their interdependent nature. Such an approach can prevent the type of universal rationality that considers innovative variables in isolation, as opposed to as part of a system and context.

In this sense, the purpose of the study is to provide a new viewpoint and explanation by addressing some unanswered questions. Incorporating institutional theory into the investigation of the relationship between innovation precursors and innovation inclinations of enterprises is thus intended. With the aid of semistructured interviews and qualitative content analysis, it is intended to determine the impact of institutional theory on the relationship between innovation inclinations and innovation determinants. Innovation entails many more failures than achievements, which are clearly understudied in innovation research. The present study is distinguished, among other things, by the fact that it focuses on an instance of widespread failure to innovate among a group of actors operating within the same local context and institutional setting. In this perspective, the study produced several significant findings. Based on these significant findings:

- 1) The educational base has a negative impact on the tendency of firms to innovate when they inhibit proactive strategies,
- Educational base has a negative impact on a company's ability to innovate when it suppresses innovation networks among professions,
- 3) The innovation propensity of firms is negatively influenced when professional and trade associations weaken customer cooperation,
- Imposed standards have a negative impact on firms' propensity to innovate when they restrict R&D activities and, as a consequence, hinder firms' knowledge acquisition,
- 5) Industry association- firm relationships have a negative impact on the innovation propensity of firms when they impede internal information creation (R&D),
- 6) Dominant business processes negatively impact propensity of firms to innovate when they weaken absorptive capacity of firms,
- Professional networks have a negative effect on the tendency of organizations to innovate when they impede the building of trust,
- Regulations have a negative effect on the tendency of firms to innovate when they weaken long-term orientation,
- Incentives and government procedures have a negative impact on companies' propensity to innovate when market structure is constrained,

- 10) Regulatory and local authorities have a negative impact on the innovation propensity of firms when they hinder firm cooperation,
- 11) Specifications and requirements of customers positively impact propensity of firms to innovate when they embrace a change orientation,
- 12) Politically powerful institutional actors have a negative impact on the innovation propensity of firms when they constrain market structure

Thus, the findings of the study set the framework for evaluating the effective innovation decision-making aspects of organizations as elements of innovation systems. Geels (2004) offered a structural basis for the innovation system process, highlighting the multi-level feature of the innovation system approach, which consists of three essential levels: niches, regimes, and panoramas, from which innovation systems are composed of multi-element processes (De Pra Carvalho et al., 2017). In this regard, the study's findings provide the opportunity to examine these factors that are found to be effective in companies' innovation decisions from the socio- technical system approach, which views innovation as a co-evolutionary process, and from the actor- network theory, which explains the effects of the elements in socio technical systems on one another. In this way, in explaining innovation as an interactive process, it is also possible to examine the innovation phenomenon from a broader perspective; by describing rule regimes/institutions with study findings such as educational base, professional associations, imposed standards, industry association/firm relationships, dominant business practices, professional networks, regulations, incentives and governmental procedures, regulatory and local authority. At the second level, in explaining innovation as an interactive process once more, it is also possible to view the innovation phenomenon from a broader perspective; by describing actors with study findings such as strategies, innovation networks, customer cooperation, formation of trust, long-term orientation, firm cooperation, and change-oriented attitudes. And at the third level once more, in the explanation of innovation as an interactive process with the innovation systems approach by the structural foundation of the actor-network theory, the system (material and structural aspects of production, resources, etc.) can be described as: R&D formation, internal information creation, absorptive capacity, market structure with the findings of the study. When these parameters produced from the findings of the study are examined through the socio-technical system, the reciprocal relationships between all of these elements are also shown. Consequently,

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the reciprocal and dynamic consequences of the study's findings on one another are presented within a fairly broad context. In such an interacting system, it is insufficient to examine the concept of innovation just from the standpoint of empirical research, in which antecedent variables are studied unilaterally and studies are done mostly independently from the local context. Important in this regard is an approach that evaluates the decisive role of institutional theory within the elements of innovation systems that treat innovation as a co-evolutionary process. In this sense, the model depicted in this framework is presented as follows in Figure 2:



Figure 2. Innovation as a co-evolutionary process and its determinants

#### 5.4.2. Implications for management practices and policy makers

In this study, several results were produced. Firstly, normative pressures stemming from an educational foundation as a guiding framework for the assumed scripts and norms might result in employee aversion to working with differentiated products as opposed to the standard products. Differentiated products may necessitate the employment of distinct production techniques and methods, and the educational foundation that dominates the institutional sector does not encourage the adoption of these techniques and methods. This reluctance from employees makes it challenging for customer companies to demand innovative and unique products from producer companies. As a result of their desire to maintain autonomy over their work procedures and traditional educational-based professional values, customer firms are concerned about the operating costs of their employees resulting from their business practices as opposed to adopting the differences in the products and production techniques. Consequently, this circumstance impacts the strategy direction of producer companies in the institutional field. The study found that, as a result of the normative pressures emerging from the educational base, enterprises are less concerned with future market possibilities and instead focus on satisfying current client needs. Thus, this circumstance reveals itself as an impediment for the examined organizations to pursue proactive strategies, which are an essential prerequisite for radical developments. Despite the fact that adopting proactive strategies is a key innovation driver in the creation of radical ideas, uncovering the obstacles prohibiting local enterprises from adopting proactive strategies will make significant contributions. In this regard, revamping the current educational foundation will enable businesses to focus more on future market needs than current market needs. Such a reorganization will push businesses to innovate their strategic orientations. In this regard, the requirement for institutional actors and policymakers to work on these challenges emerges as a significant concern. As a matter of fact, it has been observed that the determinant factor of the strategic orientations of enterprises is most frequently discussed from the perspective of government policies, such as trade restrictions, taxation, and financial concerns, or at the macro level on an industry or country basis (Dai and Si, 2018; Doblinger, 2016). In this regard, identifying the locally generated influences that influence the strategic orientations that have a substantial impact on business innovations is an important result of our study for management practices and policymakers.

In addition, it has been discovered that normative pressures stemming from the educational basis severely impact not only strategies but also innovation networks across professions. Due to incompatibilities in the professional qualifications of the actors in the institutional area, every innovation initiative cannot be continued in the same manner by other actors in succeeding production processes until it reaches its final stage. Due to the structuring effects of normative demands on the educational compatibilities of the actors in terms of their professional qualifications, it is impossible to form networks of collaborative innovation between the actors. Consequently, in light of the study's findings, it has become apparent how crucial it is for institutional actors and policymakers to consider the educational-based normative pressure in terms of their role in facilitating educational compatibility between actors within the institutional field in terms of their professional qualifications. Enabling educational compatibilities amongst actors in the institutional area in terms of their professional degrees will allow actors to share information and be part of a common output provider.

Due to the restricting impacts of professional and trade groups, enterprises and customers cannot collaborate on innovations inside the institutional field, according to executives. Due to the effects of professional and trade associations on firmcustomer collaboration, it is revealed that enterprises can only respond to existing market preferences rather than focusing on new activities, whereas collaborative efforts with customers toward innovation are conceivable. These findings suggest that, in order to capture innovation, these types of restricting impacts of normative pressures must be highlighted, and the focus should be on enhancing the function of professional and trade associations and their impact on innovation-customer cooperation. In other words, professional and trade associations should be positioned as agents of institutional change as opposed to maintainers of institutional inertia. Contrary to numerous findings in the literature, these actors have a changepreventing effect in the situation under study.

As a result of the restricting impacts of standards, companies may adopt the rationale that it is impossible to conduct knowledge searches to capture diverse types of information within the confines of precisely and stringently set criteria. Although knowledge management processes are a significant determinant of firms' innovation outputs, the limiting effects of enforced standards create difficulties for the establishment and efficient operation of knowledge management processes within

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businesses. Thus, while organizations are required to adhere to the standard of professionalism and embrace the procedures and norms set by relevant professional associations, the restricting implications of these normative constraints must also be considered. This consideration will result in the establishment of policies and roadmaps that can be effective for the innovation inclinations of firms, as firms have disclosed that enforced standards can have a detrimental influence on innovation tendencies when they impair firms' knowledge management systems.

In addition, the realization of companies' rationales for some business processrelated concerns will result from the disclosure of the norms that predominate the institutional field among enterprises. For instance, the study reveals that the habits that are developed and disseminated over time among associations and companies stimulate norms and customs as a result of institutional pressures, and these stimulated norms and customs can be effective in the R&D studies and investment decisions of firms. In order for management practices and policymakers to understand why businesses avoid R&D-based studies and investments, it will be necessary to identify the inhibitory effects of the local environment.

On the assimilation and transformation of knowledge processes within businesses, the obstructing aspects of normative impacts coming from the dominant business processes are shown. Common ideas that emanate a customary level of cognitive legitimacy by imposing normative pressure on enterprises to adopt comparable behaviors are identified as an impediment to the collection and transformation of knowledge within firms. And corporations interpret this circumstance as the cause for their lack of innovative tendencies. In order to enable local businesses to recognize the value of fresh and external information and to integrate existing knowledge into their internal systems for innovation outputs, it is necessary to identify different types of institutional effects.

Through professional networks, it is evident that certain adjustments and new systems are intended to be built across different actors in order to alter the business operations of organizations inside the institutional field.

However, due to the incompatibility of professional actors inside the professional network, such a transformation may fail to materialize. In light of the study's findings, it is clear that professional networks have a detrimental effect on the innovation propensity of businesses when they impede the building of trust. Within the context of the professional networks, the significance of the professional bodies'

involvement in controlling and auditing the standards and processes is underlined. At the time of implementing the intended industry standards and processes, it is emphasized that the human element and technology should be compatible with one another. The innovative inclinations of the companies will be positively affected by policymakers' and institutions' enhancements in these areas.

Importantly, while studies in the literature frequently highlight the positive aspects of regulations in promoting innovation, study findings indicate that, despite the fact that regulations are the mechanisms that can lead companies to innovation, their restrictive effects can hold companies back in the short term. According to the findings of the study, enforced rules can serve as decisive mechanisms for organizations to establish either long-term or short-term perspectives in terms of emphasizing their significant innovation potentials. Executives, in justifying their non-innovative inclinations, cited the impeding impact of regulations on the firms' ability to establish long-term perspectives. Consequently, it is essential to create and administer government rules and regulations in a manner that focuses on their cumulative impacts. These factors will contribute positively to firms' innovative tendencies.

Governmental regulations are also highlighted as impediments to developing a market framework that will stimulate innovation among businesses. Executives, in explaining why they avoid innovation, cited legal processes in government procedures and how these processes can impede the establishment of a market structure that will entice businesses to innovate. Policymakers will benefit from a full assessment of these challenges in government procedures when establishing the elements that will drive enterprises to innovate.

Although firm cooperation and innovation outputs are significant factors, regulatory and local authorities prevent their creation. The framework within which all public and local development services are implemented at the local level should be evaluated based on its impact on the formation of solid collaboration. These factors will contribute positively to firms' innovative tendencies.

Customers' criteria and specifications have a favorable effect on a company's propensity to innovate when its attitude toward change shifts. In this sense, implementing policies and approaches that develop and strengthen this type of market demand structure would result in positive innovation outputs.

Also demonstrated is that politically influential actors of the institution with a high amount of control over choices, laws, and regulations influence policy outcomes. According to the conclusions of the study, the relationship between market structure and innovation is determined by the pressures exerted by other power groups, such as politically influential actors. The firms describing their noninnovative tendencies described the effects of politically powerful actors on the market structure through the development of accepted sectoral applications and, consequently, their inhibiting effects on the innovation tendencies of other firms within the institutional field. Consequently, in light of the study's findings, it has become clear how crucial it is for institutional actors and policymakers to consider the effects of politically powerful actors in institutions in terms of their restrictive role for widely accepted sectoral applications and practices and their consequently inhibiting role for the adoption of different and alternative sectoral applications and practices.

In addition, it is crucial to highlight in the study's findings that in the case of failure, mimetic pressures were not shown to have a substantial impact on the innovation inclinations of organizations. In the lack of examples of organizations with innovative inclinations that cut costs and enhance processes, companies adopt a similar risk-averse stance and desire to see successful businesses. In other words, the dominant mimetic effect in the failure situation is the fact that enterprises imitate the majority's lack of innovative conduct. In this view, it is vital for management practices and policymakers to give enhancements to constructive aspects for the creation of mimetic isomorphism processes that will facilitate the dissemination of knowledge and innovation within the institutional field.

On a broader scale, this study's failure case illustrates connections between institutional dynamics and actor-network dynamics. Inversely, it might be argued that mechanisms of the latter can counteract the innovation-stifling consequences of the former. For instance, policymakers may actively participate in the actor network from the bottom up, as opposed to only establishing regulations and incentive programs from the top down.

## **CHAPTER 6: CONCLUSION**

#### 6.1. Limitations of the study

Because the study was done in a specific region (Manisa and Izmir) and in a specific industry (primarily the construction sector, which includes the ready-mixed concrete and brick and tile sectors), the generalizability of the findings may be questioned. In this regard, it is desired to reduce the effect of comparable sample qualities by including diverse sample segments, such as firms with different structures and respondents with distinct characteristics. In examining and describing behaviors, activities, and thoughts, the inclusion of varied sample segments provides rich information, while relatively small samples are used to determine whether there are common and shared phenomena. In addition, to eliminate apparent doubts about the generalizability and credibility of the study, the sample size was selected based on the premise that reaching repeating behaviors, actions, and thoughts from the participants' perspectives would establish validity and sufficiency. While the study's validity was being evaluated, care was taken to ensure that the research questions did not influence the data collection and analysis phases. Additionally, in semistructured interviews, the questions related to the theoretical framework are not used in a directly related manner, rather the questions are formed from general expressions in a non- directive way that allow the participants to speak about processes related with the theoretical framework of the study. Moreover, in order to eliminate personal biases during the process of analyzing the study's findings, repetitive and penetrating questions were asked throughout the interviews.

# 6.2. Future work

The study was limited by the fact that it was done in a specific region (Manisa and Izmir) and in a specific industry (mainly construction sector, which includes ready - mixed concrete and brick and tile industries). This restriction also opens up new avenues for future investigation. To evaluate the validity of the findings of this thesis study, it would be beneficial to broaden and diversify the study sample by additionally examining diverse local contexts in terms of distinct institutional frameworks. This would both broaden the study sample for the validity of the results and allow comparisons between various local settings in terms of institutional impacts and their decisive effects on innovation precursors and innovation propensity linkages. In addition to comparing the effects of institutional environments in different local contexts, it may be fruitful to examine institutional environments in different sectors working within the same local dynamics. This question may be useful for revealing how and why institutional effects vary across sectors. This analysis will also permit the creation of many impactful elements and the empirical testing of variables resulting from these factors. This circumstance will allow innovation studies, which are conducted empirically for the most part, to be handled alongside supplementary qualitative research studies, so moving away from universal rationality approaches.

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### APPENDICES

APPENDIX A. Researcher memo and description

My earliest research on the concept of innovation occurred concurrently with regional development agency projects. Throughout these procedures, I participated in numerous sectoral meetings for the establishment of strategic plans based on innovation that will assure regional development. Always, my observations have been as follows: companies wish to innovate, and all the necessary parts are known by participants in terms of innovation determinants; yet, there is full desertion at the point of execution following meetings where innovation requirements are presented. After making these findings, I decided to investigate the concept of innovation in a local setting. Nonetheless, as I attempted to gain a deeper understanding of the concept of innovation by reviewing the relevant literature in Turkey, I discovered that the concept is primarily studied within the framework of cause-and-effect relationships in terms of empirical studies, beginning from the axis of foreign studies that is distant from local dynamics. The topic of how much these cause-and-effect linkages in empirical studies reflect the local environment prompted me to ponder how innovation is defined locally and what factors influence the innovation tendencies of businesses in the local context. I created semi-structured interview questions and listened to the perspectives of field participants with all my study motivation. I acquired my data in a trusting and amicable setting as a result of numerous and lengthy interactions with factory owners and managers. In these encounters, I posed my inquiries as an inquisitive student, without asking reflective questions about the theoretical framework I've employed in my thesis. During these discussions, I was solely concerned with determining whether or not I could achieve repeated findings from different interviews by putting aside personal knowledge and biases. As I began to see recurring findings from several interviews, my observations centered on how institutional environment aspects have a significant impact on the innovation inclinations of organizations, particularly innovation precursors and innovation tendency links.

#### APPENDIX B. Semi- structured interview questions

#### A. Stratejik bağlam ve firma dinamikleri

Soru1: Tedarik sağlayıcılarınızdan bahsedebilir misiniz? onlarla çalışmak rahat oluyor mu.. üzerinizde baskı/güç uyguladıkları oluyor mu... (tedarikçilerin gücü )

Soru2: Sektörünüzde rekabeti nasıl değerlendiriyorsunuz... rekabetteki firma sayısı, rekabet güçleri arasındaki farklılıklar nasıl... büyüyen bir sektör mü... büyüme hızı, sektördeki ürünlerin benzer/farklılaştırılmış olması açısından nasıl bir sektör... firmanızı bu konuda nasıl değerlendiriyorsunuz... (rekabet yoğunluğu)

Soru3: Sektöre yeni girişler kolay olabiliyor mu... zor mu oluyor... nedenleri neler... (firmaların giriş tehdidi)

Soru4: Sektörde ikame ürünlerin bulunabilirliği nasıl... fiyatları ve kalite düzeyleri açısından ürünlerinize etkisi nasıl... (ikame mal tehdidi)

Soru5: Müşteri alımları nasıl... alıcılarınızın sizi etkilediği noktalar oluyor mu... firmalar üzerinde belirleyicilikleri oluyor mu... hangi noktalarda... (alıcıların gücü)

Soru 6: Kaç yıllık bir firma... çalışan sayısı... pazara ne kadar hakim (satış yüzdesi diğer firmalara göre...) satış hacminin ne kadarı yurt içi... yurt dışı... aile firması mı yoksa ortaklı bir firma mı... işe alım yapılıyor mu... bu iş alanı nasıl gelişti... (firma dinamikleri)

B. Rekabette inovasyona yönelik eğilim ve kurumsal kuram

Soru 7: Sektörde nasıl bir rekabet yapısı var... rekabette size göre nerdesiniz...diğer firmalara kıyasla nasıl değerlendiriyorsunuz...

Sonda (probe): Rekabet etmede zorlandığınız oluyor mu... ne gibi zorluklar... üstesinden gelebilmek için neler yapıyorsunuz... Sonda (probe): Rekabette diğer firmalara göre avantajlı durumda olabilmek adına neler yapıyorsunuz...

Soru 8: Inovasyondan ne anlıyorsunuz... size inovasyon ne ifade ediyor...

Sonda (probe): Firmanızda yenilik/inovasyon gerçekleştirdiğiniz oldu mu? Oluyor mu? Hangi alandaydı/alanda bu yenilikler (üretim, dağıtım, süreç, yönetim, pazarlama) bu süreçlerden biraz bahsedebilir misiniz...

Sonda (probe): Size bu yönelime gitmede neler etkili oldu? diğer firmalar mı etkili oldu... yoksa zorunlu bir durum mu oldu? nasıl bunun kararını verdiğinizden bahsedebilir misiniz...

Sonda (probe): Yapmayı düşündüğünüz ya da yapmanız gerektiğine inandığınız ama yapmadığınız bir yenilik var mı/oldu mu... sebepleri neydi/nelerdir...

Sonda (probe): Ar- ge biriminiz var m1... varsa ya da yoksa nedeni nedir...

Soru 9: Genel anlamda sektörde ne gibi inovasyonlar olabiliyor... biraz bahsedebilir misiniz... siz bunları uyguluyor musunuz... size göre ne düzeyde...

Sonda (probe): Uygulamıyorsanız neden... gerek mi görmüyorsunuz... yoksa sizi kısıtlayan, engel olan durumlar mı var...

Sonda (probe): Bu bölgede faaliyet gosteren firmaları değerlerlendirdiğinizde size göre yapılan inovasyonlar gereken düzeyde mi... gerek kendi gerekse diğer firmaları değerlendirdiğinizde, size göre inovasyon olması gereken düzeyde mi?

Sonda (probe): Farklı uygulamalar olabilir mi? olmuyorsa/neden olmuyor? sizin kurumunuzda mı böyle yoksa sektörde mi? (taklitçi baskılar)

Soru 10: Burda faaliyetlerini izleyip, benimsediğiniz örnek aldığınız firmalar olabiliyor mu... inovasyon faaliyetlerinizi şekillendirmenizde etkisi sizce nasıl... etkisi olduğunu düşünüyor musunuz... (taklitçi baskılar)

Sonda (probe): Sektörde faaliyet gösteren firmaları düşündüğünüzde, yenilik yapma/inovasyon anlamında nasıl bir yapı var burda... tüm firmalar benzer mi... farklılık gösteriyor mu bu anlamda... (taklitçi baskılar)

Sonda (probe): Bu firma bunu yaptı ben de yapayım... ya da bunu yapmadı ben de yapmıyayım dediğiniz durumlar oluyor mu... bu kararlarınızı neye göre veriyorsunuz... (taklitçi baskılar)

Sonda (probe): Sektörde belirsizlik ve risk yaşadığınız durumlar oluyor mu... ne gibi durumlar... bu durumda rekabette avantaj elde edebilmek için nasıl bir yol izliyorsunuz... (taklitçi baskılar)

Soru 11: Yenilik yapmada inovasyon kararları almanızda... sizi kısıtlayan, zorlayan durumlar, kurallar... bunları hissettiğiniz hiç oldu mu, oluyor mu... neler bunlar bahsedebilir misiniz... (zorlayıcı baskılar)

Soru 12: Burda yapısal olarak tüm firmalar benzer mi (sermaye, ticari etkinlik, network gücü anlamında...) sektörde yönlendirici ya da kısıtlayıcı etkileri oluyor mu... bu etkiler sizin inovasyon girişimlerinizi şekillendiriyor mu... yaşadığınız durumlar oldu mu, hiç oluyor mu... (zorlayıcı baskılar)

Soru 13: Sektördeki belli başlı kurumlara yakın olmanın ya da güç dengelerinin önemli olduğuna inanıyor musunuz... bunun nasıl bir etkisi oluyor... yaptığınız ya da yapmayı düşündüğünüz inovatif faaliyetlerde bunun etkisini hissettiğiniz oldu mu oluyor mu... biraz bahsedebilir misiniz? (zorlayıcı baskılar)

Soru 14: Her sektörde yıllar boyunca geliştirilmiş alışılmış kanıksanmış davranış pratikleri, iş yapış şekilleri gözlemlenebiliyor... sizde de var mı bu pratikler... (normatif baskılar)

Soru 15: Yenilik, inovasyon yapmada benim önümü tıkıyor... şu alışkanlıkları kırsam da farklı birşeyler yapsam dediğiniz oluyor mu... size göre bu alışkanlıklar nerden kaynaklanıyor olabilir... (normatif baskılar)

Sonda (probe): Yenilik yapmada gerek müşteri tercihlerinde gerek iş yapış şekillerinde gerekse sektörel yapıdan kaynaklı alışkanlıkların olumlu ya olumsuz etkilerini hissettiğiniz ne gibi konular var... (normatif baskılar)

Soru 16: Meslek birliklerinin firmaları etkilediği... ya da firmaların koydukları kaidelerle diğer firmaları etkilediği durumlar olabiliyor mu... ne gibi durumlar bahsedebilir misiniz... bu kaidelerin inovasyon girişimlerinizi şekillendirdiğini düşünüyor musunuz... bahsedebilir misiniz... (normatif baskılar)

Sonda (probe): Firmalar arası işbirlikleri ile bilgi yaratımı, inovatif kazanımlar elde etme olabiliyor mu... mesleki kuruluşların meslek birliklerinin etkisini nasıl değerlendiriyorsunuz... firmalar arası ortak bir çalışma olabiliyor mu... neden... (normatif baskılar)

Sonda (probe): Çoğunlukla ortak bir bakış açısı mı hakim sizce burda... bu durumu neye bağlıyorsunuz... firma sahiplerinin benzer koşullardan gelmesi, eğitim düzeyi, çalıştırdıkları eleman... vb... neler sebep oluyor sizce bu duruma... çalışanların firmalar arası geçişleri oluyor mu... genellikle nasıl bir geçmişe ait çalışanlar... bunun çalışan davranışlarında olumlu olumsuz etkilerini gözlemlediğiniz oluyor mu inovasyon girişimlerinizde bunun etkilerini hissediyor musunuz... (normatif baskılar)

Sonda (probe): Firmalar arası bilgi aktarımı... bilgi yaratımı olabiliyor mu... ne engel oluyor bu duruma... (normatif baskılar)

Soru 17: Sektörünüzdeki mesleki profesyonelleşmeyi nasıl tanımlıyorsunuz... olumlu ya da olumsuz etkili olduğu durumlar yaşanıyor mu... nasıl değerlendiriyorsunuz... inovasyon faaliyetleri üzerinde nasıl bir etkisi olduğunu düşünüyorsunuz... yaşadığınız olaylar var mı hiç bu konuyla ilgili... (normatif baskılar)

### RESUME

# Adviye Ahenk Aktan Turgutlu Anatolian High School is where she graduated from high school. She graduated from Istanbul Kadir Has University with a bachelor's degree in Business Administration on a full scholarship. She enrolled in the integrated Ph.D. program in Business Administration with a concentration in management and organization at Izmir University of Economics while also working as a research assistant in the Business Administration department.



## ETHICS COMMITTEE APPROVAL

SAYI : B.30.2.İEÜ.0.05.05-020-222

30.06.2022

KONU : Etik Kurul Kararı hk.

Sayın Prof. Dr. Mehmet Gencer ve Adviye Ahenk Aktan,

"The Impact of Institutional Environment on Innovation Tendencies of Firms" başlıklı projenizin etik uygunluğu konusundaki başvurunuz sonuçlanmıştır.

Etik Kurulumuz 30.06.2022 tarihinde sizin başvurunuzun da içinde bulunduğu bir gündemle toplanmış ve Etik Kurul üyeleri projeleri incelemiştir.

Sonuçta 30.06.2022 tarihinde "The Impact of Institutional Environment on Innovation Tendencies of Firms" konulu projenizin etik açıdan uygun olduğuna oy birliğiyle karar verilmiştir.

Gereği için bilgilerinize sunarım. Saygılarımla,

Prof. Dr. Murat Bengisu Etik Kurul Başkanı